

**United States Department of the Interior  
Bureau of Land Management**

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**Environmental Assessment  
DOI-BLM-CO-N050-2023-0023EA**

**LO7 Group Grazing Authorization Renewals on the LaGrange R.  
(CO06825), Amick (CO06824), West Amick (CO02936),  
LO7 Hill (CO06804), Flag Creek (CO06816),  
Raley R. (CO06823), West Miller Creek (CO00020),  
Dry Creek (CO06829), Woodward T. (CO06835),  
Jolly H. (CO06831), and Petrolite (CO00055) Allotments**

**March 2023**

U.S. Department of the Interior  
Bureau of Land Management  
Northwest District  
White River Field Office  
220 East Market St  
Meeker, CO 81641



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# 1. INTRODUCTION

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**Project Title:** LO7 Group Grazing Authorization Renewals

**Applicant(s):** *The Permittee/Lessee(s) of the following grazing allotments LaGrange R. (CO06825), Amick (CO06824), West Amick (CO02936), LO7 Hill (CO06804), Flag Creek (CO06816), Raley R. (CO06823), West Miller Creek (CO00020), Dry Creek (CO06829), Woodward T. (CO06835), Jolley H. (CO06831), and Petrolite (CO00055).*

**NEPA Document Number:** DOI-BLM-CO-N050-2023-0023-EA

**Location:** The LaGrange R. allotment is located in Township 1 South, Range 94 West, portions of Sections 11, 14-15.

The Amick allotment is located in Township 1 South, Range 93 West, portions of Sections 17, 20, and 30.

The West Amick allotment is located in Township 1 South, Range 94 West, portions of Sections 12-13.

The LO7 Hill allotment is located in Township 1 South, Range 94 West, portions of Sections 13-15, 23-26, and 35-36.

The Flag Creek allotment is in Township 1 South, Range 94 West, portions of Sections 23, 25-26, 34-36 and Township 2 South, Range 94 West, portions of Sections 1-4.

The Raley R. allotment is located in Township 2 South, Range 93 West, in Section 14.

The West Miller Creek allotment is located in Township 1 South, Range 93 West, portions of Sections 27-28, and 33-36 as well as Township 2 South, Range 93 West, portions of Sections 1-4, 8-12, and 14.

The Dry Creek allotment is located in Township 1 South, Range 92 West, portions of Sections 30-32, Township 1 South, Range 93 West, portions of Section 36, Township 2 South, Range 93 West, Section 1, and Township 2 South, Range 92 West, Section 6.

The Woodward T. allotment is located in Township 3 South, Range 94 West, portions of Sections 27, 33-25.

The Jolley H. allotment is in Township 2 South, Range 94 West, portions of Sections 28, 34-36 and Township 3 South, Range 94 West, portions of Sections 1-3, 11.

The Petrolite allotment is in Township 2 South, Range 94 West, portions of Sections 9-10, 15-16.

An overview map of these allotments is shown in Appendix A Figures 1-6. The above listed allotments will here on after be known as LO7 Group.

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### **1.1.1. Background**

The grazing authorizations on the LaGrange R., Amick, West Amick, LO7 Hill, Flag Creek, West Miller Creek, Dry Creek, Jolley H., and Petrolite allotments have been renewed within the last 5 years under the authority of Section 402(c)(2) and 402(h)(1) of the Federal Land Policy and Management Act (FLPMA), 1976 as amended.

The grazing lease for the Raley R. allotment was last renewed with DOI-BLM-CO-N050-2014-011-DNA. The grazing lease for the Woodward T. allotment was last renewed with DOI-BLM-CO-110-2011-0071-EA. Both grazing leases were issued in 2014 for a term of ten years and expire in 2024.

Rangeland Health Evaluations were completed and signed on January 20, 2023 to summarize, analyze, and evaluate the assessment information to provide an organized overview of the LaGrange R., Amick, West Amick, LO7 Hill, Flag Creek, Raley R., West Miller Creek, Dry Creek, Woodward T., Jolley H., and Petrolite allotment's current physical and biological conditions and processes. This data allows the evaluation of the area's status in relation to land health standards, to identify cause and effect relationships, and to draw conclusions about whether, or not, each applicable Rangeland Health Standard is being met for the evaluation area as a whole. The allotments are meeting Colorado Rangeland Health Standards. Water Quality Standards are a concern on the LaGrange R. allotment due to dissolved Selenium. Mobilization of selenium is typically attributed to natural runoff and return flow from irrigation. It is not likely that grazing practices have a significant impact on the dissolved selenium impairments under the Federal Clean Water Act.

Each grazing permit or lease specifies the kind and number of livestock, the period(s) of use, the allotment(s) to be used, and the amount of use, in animal unit months (AUMs) (43 CFR §4130.3-1). AUMs are the amount of forage necessary for the sustenance of one cow or its equivalent for a period of one month. In order to calculate an AUM, the number of days is multiplied by the livestock number then divided by 30.14666 or the average number of days in a month. In instances where unfenced private lands are within the allotment the percent public land is used to bill permittees/lessees solely for forage consumed on public lands. The percentage of public land use is determined by the proportion of livestock forage available on public lands within the allotment compared to the total amount of forage available [43 CFR §4130.3-2(g)].

On the LaGrange R., West Amick, LO7 Hill, Flag Creek, and Petrolite allotments physical allotment boundaries (i.e., fences) have changed over time to accommodate private property sales to non-permittees. In instances where the permittee or lessee does not have ownership or control of those private lands mapped within the allotment, an administrative adjustment is necessary (43 CFR §4110.2-4) for the proper and efficient management of the public rangelands. The West Miller Creek allotment boundary has been adjusted to reflect physical allotment

boundaries (i.e. fences) on private lands. Over the life of the grazing permit or lease, additional allotment boundary adjustments may be incorporated through adaptive management to document physical barriers on the ground. Colorado is a fence-out state and the installation of fences on private property is outside the control of the BLM.

In a similar situation, the Jolley H. allotment boundary was modified through an agreement with the affected grazing permittee. On October 19, 2021 the White River Field Office (WRFO) received a letter of conformation that Jolley Potter Ranches agreed to transfer the North Pasture portion (Pasture #1) of the Jolley H. allotment to TZ Land and Cattle Company. Upon receipt of the Special Warranty Deed, WRFO was able to issue TZ Land and Cattle Company a Grazing Lease for what is now known as the Petrolite allotment for the term of August 3, 2021, until February 28, 2026. The term would end on February 28, 2026, because the previous environmental document was completed in 2016 and was considered valid for 10 years.

Coordinated Resource Management Plans (CRMPs) are being developed for ranches throughout the WRFO. The basic concept is that coordinated management, planning, and implementation of field activities occur across ownership or management boundaries. The CRMP is a planning document that encompasses conservation practices, wildlife improvement practices, and restoration practices. Grazing authorizations that provide flexible seasons of use can easily incorporate desired changes as outlined in CRMPs to achieve resource objectives across the landscape. The process is designed to be flexible and address specific situations and contain practical and recommended actions. A CRMP is currently being developed on the LaGrange R. allotment but has not been finalized.

## **1.2. Purpose and Need for Action**

The purpose of the action is to fully process grazing authorizations for the LaGrange R., Amick, West Amick, LO7 Hill, Flag Creek, Raley R., West Miller Creek, Dry Creek, Woodward T., Jolley H., and Petrolite allotments in accordance with 43 CFR §4130.2(a) which states, “Grazing permits or leases shall be issued to qualified applicants to authorize use on the public lands and other lands under the administration of the Bureau of Land Management that are designated as available for livestock grazing through land use plans.”

The need for the action is to respond to application(s) to renew the grazing permits and leases as well as make modifications by identifying terms and conditions for grazing use that would meet or make substantial progress towards meeting the Colorado Public Land Health Standards, the Fundamentals of Rangeland Health (43 CFR §4180), and resource objectives in the White River Resource Management Plan.

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### **1.2.1. Decision to be Made**

Based on the analysis contained in this environmental assessment (EA), the BLM will decide whether to issue a livestock grazing permit or lease for the LaGrange R., Amick, West Amick, LO7 Hill, Flag Creek, Raley R., West Miller Creek, Dry Creek, Woodward T., Jolley H., and

Petrolite allotments, and if so, under what terms and conditions. The Field Manager is the responsible official who will decide one of the following:

- To approve the permittee's proposed livestock grazing schedules as submitted;
- To approve a modified livestock grazing schedule;
- To analyze the effects of the proposed livestock grazing schedule in an EIS; or
- To deny the proposed livestock grazing schedule and not issue a permit or lease for livestock grazing.

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### **1.2.2. Conformance with the Land Use Plan**

The Proposed Action is subject to and is in conformance (43 CFR §1610.5) with the following land use plan:

**Land Use Plan:** White River Record of Decision and Approved Resource Management Plan (ROD/RMP)

**Date Approved:** July 1997

**Decision Language:** "Maintain or enhance a healthy rangeland vegetative composition and species diversity, capable of supplying forage at a sustained yield to meet the demand for livestock grazing." (page 2-22)

"A minimum rest requirement (period of no livestock grazing) will be developed for each allotment as integrated activity plans are developed. This period of rest is the minimum time required to restore plant vigor, improve watershed conditions, and improve rangeland conditions. Minimum rest periods will be incorporated into grazing systems during activity plan preparation." (page 2-23, 2-25)

"An average of 50 percent of the annual above ground forage production will be reserved for maintenance of the plant's life cycle requirements, watershed protection, visual resource enhancement, and food and cover requirements of small game and nongame wildlife species. The remaining 50 percent of the forage base will be allocated among predominant grazing users." (page 2-11)

**Land Use Plan:** Northwest Colorado Greater Sage-Grouse Approved Resource Management Plan Amendment (ARMPA)

**Date Approved:** September 2015

**Decision Language:** "Objective RM-1: Greater Sage-Grouse (GRSG) objectives and well-managed livestock operations are compatible because forage availability for livestock and hiding cover for GRSG are both dependent on healthy plant communities. Agreements with partners that promote sustainable GRSG populations concurrent with sustainable ranch operations offer long-term stability. In the context of sustainable range operations, manage the range program to: 1) maintain or enhance vigorous and productive plant communities; 2) maintain residual herbaceous cover to reduce predation during GRSG nesting and early brood-rearing; 3) avoid

direct adverse impacts to GRSG-associated range project infrastructure; and 4) employ grazing management strategies that avoid concentrating animals on key GRSG habitats during key seasons.” (page 2-9)

“**MD RM-2:** (ADH) Work cooperatively on integrated ranch planning within GRSG habitat. Develop management strategies that are seamless with respect to actions on public and private lands within BLM grazing allotments.” (page 2-10)

“**MD RM-4:** (ADH) Conduct land health assessments that include (at a minimum) indicators and measurements of vegetation structure/condition/composition specific to achieving GRSG habitat objectives (Doherty et al. 2011). If local/state seasonal habitat objectives are not available, use GRSG habitat recommendations from Connelly et al. 2000 and Hagen et al. 2007.” (page 2-10)

“**MD RM-5:** (ADH) Develop specific objectives—through National Environmental Policy Act (NEPA) analysis conducted in accordance with the permit/lease renewal process—to conserve, enhance, or restore GRSG habitat. Base benchmarks on Ecological Site/Range Site Descriptions. When existing on Ecological Site/Range Site Descriptions have not been developed, or are too general to serve adequately as benchmarks, identify and document local reference sites for areas of similar potential that exemplify achievement of GRSG habitat objectives and use these sites as the benchmark reference. Establish measurable objectives related to GRSG habitat from baseline monitoring data, ecological site descriptions, or land health assessments/evaluations, or other habitat and successional stage objectives.” (page 2-10)

“**MD RM-6:** (ADH) Manage for vegetation composition and structure consistent with ecological site potential and within the reference state subject to habitat objectives, including successional stages.” (page 2-10)

“**MD RM-7:** (ADH) Include terms and conditions on grazing permits and leases that address disruptive activities that affect GRSG and assure plant growth requirements are met and residual forage remains available for GRSG hiding cover.” (page 2-10)

“**MD RM-8:** (ADH) Develop drought contingency plans at the appropriate landscape unit that provide for a consistent/appropriate BLM response. Plans shall establish policy for addressing ongoing drought and post-drought recovery for GRSG habitat objectives.” (page 2-11)

### 1.3. Management Category

Per the White River ROD/RMP, all allotments in the WRFO are placed in one of three management categories (improve, custodial, or maintain) that define the intensity of management. Allotments in the improve category are those where funding for range improvements or on-the-ground management efforts are most needed to improve the resources or to resolve serious resource conflicts. The custodial category allotments receive the lowest priority for public funding of range improvements. The West Amick, Raley R., West Miller Creek, Dry Creek, and Woodward T. allotments are all in the custodial category. The LaGrange R., Amick, LO7 Hill, Flag Creek, Jolley H., and Petrolite allotments are in the maintain category.



## 1.4. Scoping and Issues

The WRFO notified interested parties (including Colorado Department of Agriculture, Colorado Parks and Wildlife, Rio Blanco County, Dinosaur National Monument, Western Watersheds and Wildlands Defense) about this project. Internal scoping was initiated when the project was presented to the WRFO Interdisciplinary Team (IDT) on February 7, 2023. This project was posted on the WRFO's on-line NEPA register, ePlanning on February 1, 2023.

The CEQ Regulations state that EAs should “briefly provide sufficient evidence and analysis” for determining whether to prepare an environmental impact statement (EIS) or a finding of no significant impact (FONSI) (40 CFR §1501.5) and that agencies should only briefly discuss issues other than significant ones [40 CFR §1500.4(e)]. While many issues may arise during scoping, not all the issues raised warrant analysis in an EA. Issues will be analyzed if: 1) an analysis of the issue is necessary to make a reasoned choice between alternatives, or 2) if the issue is associated with a significant impact, or where analysis is necessary to determine the significance of the impact.

### 1.4.1. Issues Analyzed in Detail

| Resource Standard                                                                                   | Issue # | Issue Statement                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Public Land Health Standard #2- Riparian Systems</u>                                             | 1       | How would livestock trailing and grazing affect the vegetation and channel function of Flag Creek and its ability to meet Public Land Health Standard 2? |
| <u>Public Land Health Standard #3- Plant and Animal Communities</u>                                 | 2       | How would livestock grazing and trailing affect plant vigor and upland plant community composition?                                                      |
| <u>Public Land Health Standard #3 – Plant and Animal Communities</u>                                | 3       | How would livestock grazing impact plant communities that provide forage for big game species?                                                           |
| <u>Public Land Health Standard #3 and #4 – Plant and Animal Communities, Special Status Species</u> | 4       | How would livestock trailing and grazing affect forage and nesting cover for migratory birds, greater sage-grouse, and Columbian sharp-tailed grouse?    |

### 1.4.2. Issues Considered but Not Analyzed in Detail

LaGrange R., Amick, West Amick, LO7 Hill, Flag Creek, Raley R., West Miller Creek, Dry Creek, Woodward T., Jolly H., and Petrolite allotments were assessed for the 5 Land Health Standards; Upland Soils, Vegetation Communities, Plant and Animal Communities, Water Quality and Special Status Species. The allotments are meeting Colorado Rangeland Health Standards. Water Quality Standards are a concern on the LaGrange R. allotment due to dissolved

Selenium. Mobilization of selenium is typically attributed to natural runoff and return flow from irrigation. Current livestock grazing practices are not significant factors. It is not likely that grazing practices have a significant impact on the dissolved selenium impairments under the Federal Clean Water Act. There were no additional issues observed within the allotments. All allotments were functioning properly and had no major issues. Land Health Assessments can be provided by the WRFO.

Other resources might be present within the allotments, but are not analyzed in detail because all standards were being met.

## **Cultural Resources**

How would livestock trailing and congregation areas affect cultural resources?

Livestock grazing can adversely affect cultural sites through physical impacts including displacing, damaging, or destroying artifacts and features as a result of tramping or churning of site soils. Livestock can also impact sites by standing on, leaning, or rubbing against above-ground cultural features including historic structures and rock art (Osborn et al. 1987). Such impacts can also lead to new or exacerbated soil erosion that in turn exposes or displaces artifacts and places cultural resources at increased risk for potential unlawful collection. Such impacts to historic properties are at increased risk where livestock concentrate, including near water or salting sources as well as shaded areas where concentrated bedding may occur.

Under the combined Section 106 and NEPA review, and in accordance with CO-IM-2002-029, WRFO completed Range Allotment Cultural Resource Assessments for the LO7 Group Grazing Authorization Renewals addressing potential cultural resource concerns for each allotment on 2/23/2023. The associated records search conducted for each of the 11 allotments and their known livestock concentration areas in the LO7 Group, in addition to a 6.7-acre survey on two concentration areas of potential concern in the LaGrange R. allotment (Walton 2022), did not identify cultural resource concerns. Collectively, ~1.3% of the LO7 Group allotments have been surveyed at the Class III intensive pedestrian level (including 1.2% BLM surface); these allotments otherwise overlap with an area considered to have low potential for historic properties given high elevation, distance from perennial water, and/or steeper slopes.

As a result of these inventories, no historic properties are known to overlap with any known livestock concentration in any allotment. The cultural resources that otherwise overlap with one or more of these allotments are either Not Eligible for the National Register of Historic Places (NRHP) and thereby do not require a revisit (i.e., 5GF.276, 5RB.2737, 5RB.3711, 5RB.8803, and 5RB.9006) or lack potential for being adversely affected: State Highway 13 (5RB.4486) and is Eligible for the NRHP and homestead 5RB.3710 is potentially Eligible (Needs Data). As determined under the Range Allotment Cultural Resource Assessments, both resources only border the Jolly H. allotment and their primary components as previously mapped are separated from livestock activities by fencing. Therefore, there is no potential for

adverse effects to the characteristics that make either resource (potentially) Eligible as a result of the proposed renewals.

As such, this resource does not require detailed analysis as there would be no adverse effects to known historic properties as a result of authorizing the proposed renewals, but further assessments for cultural resources will occur as part of future NEPA analysis.

## **Upland Soils**

How would livestock grazing and trailing with the proposed changes in season of use and duration, affect soil stability, compaction, and erosion?

There is no excessive erosion or any signs of soil instability, subsidence, or slumping within the allotments. No visual erosion associated with altered plant communities caused by prolonged concentrated grazing or increased bare ground resulting from previously recorded droughts has been observed. Upland soils are meeting land health standards under current management. The proposed changes in season of use would allow livestock producers to graze public lands throughout the growing season providing additional flexibility to adapt to environmental changes. A design feature has been incorporated to improve livestock distribution on public lands. Trailing livestock across public lands is not anticipated to result in additional soil compaction. Soil compaction is typically limited to concentration areas, water holes, and along fence lines. Within the LaGrange R. allotment an “open play” area was constructed for motorized uses. The “open play” area is subjected to heavy motorized traffic within the designated area. This has increased motorized use within the LaGrange R. allotment causing some access routes to channel and show signs of extensive soil erosion. These actions are not considered to be the fault of livestock use. This resource does not require detailed analysis.

## **Water Quality**

How would livestock grazing affect water quality on Flag Creek?

The Colorado Section 303(d) list of the Federal Clean Water Act identifies waterbodies where there are exceedances of water quality standards or nonattainment of uses. It is not likely that grazing practices have a significant impact on the dissolved selenium impairments. There is naturally occurring selenium documented in Mancos Shale and other sedimentary rocks in this area. Mobilization of selenium is typically attributed to natural runoff. Naturally occurring selenium has been known to enter surface water systems from return flow from irrigation (Mast, 2021). This resource does not require detailed analysis.

## **Special Status Animal Species**

How would livestock trailing and grazing affect potentially suitable habitat for Canada Lynx?

The majority of the Raley R. allotment is delineated as potential lynx habitat by Colorado Parks and Wildlife (CPW), though it does not overlap with U.S. Fish and Wildlife Service designated critical habitat for the species and the allotment is at the lower elevation range of preferred lynx habitat in Colorado (8,400 ft). While the allotment may have the potential to be utilized by lynx for opportunistic foraging or movement/dispersal, it is unlikely that this small tract of land could support an individual animal for extended periods of time. The steepness of the slope and lack of mid-slope benches likely deters use, as lynx tend to make lesser use of steep slopes. Coniferous regeneration, an important habitat component of lynx's principal prey, snowshoe hare is limited throughout the parcel. There is no indication that Canada lynx inhabit or make important use of this allotment. This resource does not require detailed analysis.

## **Livestock Grazing**

How would extending the season of use on the allotments change livestock management?

The proposed season of use change would affect how livestock grazing occurs on both public and private lands within the allotments. As indicated by the low percentage of public lands within most of the allotments, the primary source of forage is on private lands. The proposed changes in season of use would give the permittee/lessee increased flexibility in how livestock are managed. This would allow the permittee/lessee to make changes based on annual variation and changing environmental conditions. Through the annual grazing application process a plan of operation will be developed by the permittee/lessee and the BLM. Any pasture rotations necessary to ensure that growing season rest is provided to ensure continued conformance with Colorado Livestock Grazing Management Guidelines (RMP C-3) will be incorporated on an annual basis. Livestock management would benefit from the proposed modification to grazing schedules. The proposed changes in season of use would allow livestock producers to graze public lands throughout the growing season providing additional flexibility to adapt to environmental changes. This resource does not require detailed analysis. Impacts to plant vigor and resiliency potentially resulting in changes in plant community composition will be analyzed under vegetation.

## **2. ALTERNATIVES**

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This section will describe the alternatives that will be analyzed, as well as describing the alternatives that were considered and why they were eliminated from detailed analysis.

### **2.1. Alternative A- Continuation of Current Management (No Action Alternative)**

### 2.1.1. Grazing Permit and Schedule

Under Alternative A, the BLM would issue a grazing permit or lease with the same terms and conditions as the existing grazing authorizations. Livestock grazing permits and leases must specify terms and conditions pursuant to (43 CFR §4130.3-1). Terms and conditions are outlined below, but the standard terms and conditions applicable to all permits and leases would still apply (Appendix C). Current grazing AUM preference for the LO7 Group are reflected in Table 1 below. The only authorization with suspended AUMs is the Woodward T. allotment.

**Table 1. Current Grazing Authorization Information**

| Allotment Name | Allotment Number | Active AUMs <sup>1</sup> | Suspended AUMs <sup>2</sup> |
|----------------|------------------|--------------------------|-----------------------------|
| LaGrange R.    | CO06825          | 248                      |                             |
| West Amick     | CO02936          | 102 <sup>3</sup>         |                             |
| Amick          | CO06824          | 36                       |                             |
| LO7 Hill       | CO06804          | 382 <sup>3</sup>         |                             |
| Flag Creek     | CO06816          | 217                      |                             |
| West Miller    | CO00020          | 100                      |                             |
| Dry Creek      | CO06829          | 32                       |                             |
| Jolley H.      | CO06831          | 89                       |                             |
| Raley R.       | CO06823          | 30                       |                             |
| Woodward T.    | CO06835          | 88                       | 160                         |
| Petrolite      | CO00055          | 67                       |                             |

<sup>1</sup> Active AUMs refers to AUMs associated with “active use” (43 CFR § 4100.0-5).

<sup>2</sup> Suspended AUMs are the result of previous reductions in permitted use (43 CFR § 4110.3-2) and are not currently available for livestock grazing.

<sup>3</sup> CO-110-2008-251-EA, DOI-BLM-CO-110-2010-0060-DNA, and DOI-BLM-CO-110-2011-0074-DNA implemented a reduction from 103 AUMs to 63 AUMs on the West Amick allotment and an increase from 253 AUMs to 276 AUMs on the LO7 Hill allotment. Due to a yearling conversion which authorized a yearling cow at 0.7 AUM/month the AUM figure on the grazing lease, grazing applications, and grazing bills has been higher than the grazing schedule analyzed in the EA.

**Tables 2. Current Grazing Permit for Active Use within the La Grange R. allotment.**

| Allotment/ Pasture Name | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs   |
|-------------------------|------------------|-----------|--------|------|------|-------------------|----------------------------|------------|
|                         |                  | Number    | Kind   | On   | Off  |                   |                            |            |
| La Grange R.            | 06825            | 70        | Cattle | 6/1  | 9/30 | 281               | 88                         | 247        |
| <b>Totals:</b>          |                  |           |        |      |      | <b>281</b>        |                            | <b>247</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the allotment.

### Current Grazing Permit Terms & Conditions within the La Grange R. allotment.

It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on the public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objectives of cultural patrimony the permittee is to stop activities that might disturb such materials and notify the field office manager immediately.

**Tables 3. Current Grazing Lease for Active Use within the Amick allotment.**

| Allotment/ Pasture Name | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs |
|-------------------------|------------------|-----------|--------|------|------|-------------------|----------------------------|----------|
|                         |                  | Number    | Kind   | On   | Off  |                   |                            |          |
| Amick/Tomlinson         | 06824            | 100       | Cattle | 6/20 | 8/5  | 155               | 8                          | 12       |
| Amick/Middle            | 06824            | 100       | Cattle | 8/6  | 9/30 | 184               | 13                         | 24       |
| Totals:                 |                  |           |        |      |      | 339               |                            | 36       |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the pasture/allotment.

### Current Grazing Lease Terms & Conditions within the Amick allotment.

It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on the public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objectives of cultural patrimony the permittee is to stop activities that might disturb such materials and notify the field office manager immediately.

**Tables 4. Current Grazing Lease for Active Use within the West Amick<sup>2</sup> allotment.**

| Allotment/ Pasture Name | Allotment Number | Livestock |                 | Date            |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs |
|-------------------------|------------------|-----------|-----------------|-----------------|------|-------------------|----------------------------|----------|
|                         |                  | Number    | Kind            | On <sup>3</sup> | Off  |                   |                            |          |
| Amick W/Copley Place    | 02936            | 50        | Yearling Cattle | 5/15            | 6/15 | 53                | 20                         | 11       |
| Amick W/West Pasture    | 02936            | 50        | Yearling Cattle | 5/15            | 6/15 | 53                | 100                        | 53       |
| Amick W/Copley Place    | 02936            | 50        | Yearling Cattle | 8/2             | 8/15 | 23                | 20                         | 5        |
| Amick W/West Pasture    | 02936            | 50        | Yearling Cattle | 8/2             | 8/15 | 23                | 100                        | 23       |
| Totals:                 |                  |           |                 |                 |      | 152               |                            | 92       |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the pasture/allotment.

<sup>2</sup> Previous grazing lease renewal documents CO-110-2008-251-EA and DOI-BLM-CO-110-2010-0060-DNA analyzed a reduction in authorized AUMs. This reduction from 103 to 63 was outlined in a December 12, 2010 proposed decision. Due to a request by the lessee at the time (Darryl Stout) the EA analyzed a yearling conversion which authorized a yearling cow at 0.7 AUM/month. That proposed decision stated, "For billing purposes... Yearling cattle are billed at a rate of one AUM. This means that the AUM figure on your grazing lease, grazing applications, and grazing bills are and will be higher than the figures in the grazing schedules analyzed in the environmental assessment documents." However, DOI-BLM-CO-110-2011-0074-DNA outlined 103 AUMs.

<sup>3</sup>Because each grazing year is different, some flexibility is allowed for turn on dates. In general, BLM would estimate that the adjustment for the West Amick allotment would be a seven day delay.

### **Current Grazing Lease Terms & Conditions within the West Amick allotment.**

Livestock grazing in the West Amick Allotment (#02936) will follow the grazing schedule outlined in the NEPA Document #DOI-BLM-CO-110-2010-0060-DNA and #DOI-BLM-CO-2011-0064-DNA regarding livestock class (cow/calf pairs/bulls/and yearlings).

The permittee shall submit an actual use form to the BLM within 15 days after completion of their annual grazing use as outlined in 43 CFR §4130.3-2(d).

In order to improve livestock distribution on public lands, no salt blocks or mineral supplements will be placed within 1,000 feet of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless authorized.

It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on the public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objectives of cultural patrimony the permittee is to stop activities that might disturb such materials and notify the field office manager immediately.

**Tables 5. Current Grazing Lease for Active Use within the LO7 Hill<sup>2</sup> allotment.**

| Allotment/ Pasture Name | Allotment Number | Livestock |                 | Date |       | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs   |
|-------------------------|------------------|-----------|-----------------|------|-------|-------------------|----------------------------|------------|
|                         |                  | Number    | Kind            | On   | Off   |                   |                            |            |
| L07 Hill/Red Canyon     | 06804            | 100       | Cattle          | 5/20 | 6/15  | 89                | 13                         | 12         |
| L07 Hill/Lower Dewey    | 06804            | 163       | Yearling Cattle | 6/1  | 7/5   | 188               | 39                         | 73         |
| L07 Hill/Green Sign     | 06804            | 163       | Yearling Cattle | 7/5  | 7/24  | 107               | 38                         | 41         |
| L07 Hill/Upper Dewey    | 06804            | 163       | Yearling Cattle | 7/24 | 9/15  | 289               | 72                         | 208        |
| L07 Hill/Red Canyon     | 06804            | 100       | Cattle          | 9/15 | 10/15 | 102               | 13                         | 13         |
| L07 Hill/Green Sign     | 06804            | 91        | Yearling Cattle | 9/16 | 9/30  | 45                | 38                         | 17         |
| L07 Hill/Lower Dewey    | 06804            | 91        | Yearling Cattle | 9/16 | 9/30  | 45                | 39                         | 18         |
| <b>Totals:</b>          |                  |           |                 |      |       | <b>865</b>        |                            | <b>382</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the pasture/allotment.

<sup>2</sup> Previous grazing lease renewal documents CO-110-2008-251-EA and DOI-BLM-CO-110-2011-0074-DNA analyzed an increase in authorized AUMs from 253 to 276. This increase was outlined in a December 12, 2010 proposed decision. The EA also analyzed a yearling conversion which authorized a yearling cow at 0.7 AUM/month. The proposed decision stated, "For billing purposes... Yearling cattle are billed at a rate of one AUM. This means that the AUM figure on your grazing lease, grazing applications, and grazing bills are and will be higher than the figures in the grazing schedules analyzed in the environmental assessment documents."

**Current Grazing Lease Terms & Conditions within the LO7 Hill allotment.**

Livestock grazing in the LO7 Hill Allotment (#06804) will follow the grazing schedule outlined in the NEPA Document #CO-110-2008-251-EA and #DOI-BLM-CO-110-2011-0074-DNA regarding livestock class (cow/calf pairs/bulls/and yearlings).

The permittee shall submit an actual use form to the BLM within 15 days after completion of their annual grazing use as outlined in 43 CFR §4130.3-2(d).

In order to improve livestock distribution on public lands, no salt blocks or mineral supplements will be placed within 1,000 feet of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless authorized.

It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on the public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objectives of cultural patrimony the permittee is to stop activities that might disturb such materials and notify the field office manager immediately.

**Table 6. Current Grazing Lease for Active Use within the Flag Creek allotment.**

| Allotment/ Pasture Name | Allotment Number | Livestock |        | Date  |       | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs   |
|-------------------------|------------------|-----------|--------|-------|-------|-------------------|----------------------------|------------|
|                         |                  | Number    | Kind   | On    | Off   |                   |                            |            |
| Flag Creek/Northside    | 06816            | 250       | Cattle | 5/5   | 5/31  | 222               | 24                         | 53         |
| Flag Creek/Northside    | 06816            | 12        | Horse  | 10/1  | 11/15 | 18                | 24                         | 4          |
| Flag Creek/Northside    | 06816            | 20        | Cattle | 10/15 | 11/15 | 21                | 24                         | 5          |
| Flag Creek/Southside    | 06816            | 300       | Cattle | 5/1   | 5/31  | 306               | 47                         | 144        |
| Flag Creek/Southside    | 06816            | 12        | Horse  | 10/1  | 11/30 | 24                | 47                         | 11         |
| <b>Totals:</b>          |                  |           |        |       |       | <b>591</b>        |                            | <b>217</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the pasture/allotment.

**Current Grazing Lease Terms & Conditions within the Flag Creek allotment.**

It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on the public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objectives of cultural patrimony the permittee is to stop activities that might disturb such materials and notify the field office manager immediately.

**Tables 7. Current Grazing Lease for Active Use within the Raley R. allotment.**

| Allotment/ Pasture Name | Allotment Number | Livestock |        | Date |       | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs  |
|-------------------------|------------------|-----------|--------|------|-------|-------------------|----------------------------|-----------|
|                         |                  | Number    | Kind   | On   | Off   |                   |                            |           |
| Raley R.                | 06831            | 30        | Cattle | 5/1  | 10/26 | 177               | 17                         | 30        |
| <b>Totals:</b>          |                  |           |        |      |       | <b>177</b>        |                            | <b>30</b> |



<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the allotment.

### **Current Grazing Lease Terms & Conditions within the Raley R. allotment.**

It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on the public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objectives of cultural patrimony the permittee is to stop activities that might disturb such materials and notify the field office manager immediately.

**Tables 8. Current Grazing Lease for Active Use within the West Miller Creek allotment.**

| Allotment/ Pasture Name | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs   |
|-------------------------|------------------|-----------|--------|------|------|-------------------|----------------------------|------------|
|                         |                  | Number    | Kind   | On   | Off  |                   |                            |            |
| West Miller Creek       | 00020            | 315       | Cattle | 5/1  | 6/10 | 425               | 8                          | 34         |
| West Miller Creek       | 00020            | 100       | Cattle | 6/11 | 10/5 | 385               | 8                          | 31         |
| West Miller Creek       | 00020            | 495       | Cattle | 10/6 | 11/1 | 439               | 8                          | 35         |
| <b>Totals:</b>          |                  |           |        |      |      | <b>1249</b>       |                            | <b>100</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the pasture/allotment.

### **Current Grazing Lease Terms & Conditions within the West Miller Creek allotment.**

Grazing use will occur as per the grazing schedule outlined in EA#CO-110-06-040EA.

A grazing utilization limit averaging 50 percent of annual growth in key forage areas will be applied to public lands in the West Miller Creek Allotment.

In order to improve livestock distribution on the public lands, no salt blocks and or mineral supplements will be paced within ¼ mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated through a written agreement or decision in accordance with 43 CFR §4130.3-2(c).

In accordance with 43 CFR §4130.8-1(f): Failure to pay grazing bills within 15 days of the due date specified in the bill shall result in a late fee assessment. Payment made later than 15 days after the due date shall include the appropriate late fee assessment. Failure to make payment within 30 days may be a violation or 43 CFR § Sec. 4140.1(b)(1) and shall result in action by the authorized officer under 43 CFR Secs 4150.1 and 4160.1-2 (trespass).

No grazing can be authorized under this grazing lease during any period of delinquency in the payment of amounts due in settlement for unauthorized grazing use.

The lessee shall provide reasonable administrative access across private and leased lands to the BLM for the orderly management and protection of the public lands, as outlined in 43 CFR §4130.3-2(h).

It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on the public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objectives of cultural patrimony the permittee is to stop activities that might disturb such materials and notify the field office manager immediately.

**Tables 9. Current Grazing Lease for Active Use within the Dry Creek allotment.**

| Allotment/ Pasture Name | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs  |
|-------------------------|------------------|-----------|--------|------|------|-------------------|----------------------------|-----------|
|                         |                  | Number    | Kind   | On   | Off  |                   |                            |           |
| Dry Creek               | 06829            | 50        | Cattle | 7/1  | 9/30 | 151               | 21                         | 32        |
| <b>Totals:</b>          |                  |           |        |      |      | <b>151</b>        |                            | <b>32</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the allotment.

### **Current Grazing Lease Terms & Conditions within the Dry Creek allotment.**

Grazing use will occur as per the grazing schedule outlined in EA CO-110-06-039-EA.

A grazing utilization limit averaging 50 percent of annual growth in key forage areas will be applied to public lands in the Dry Creek Allotment.

In order to improve livestock distribution on the public lands, no salt blocks and or mineral supplements will be paced within ¼ mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated through a written agreement or decision in accordance with 43 CFR §4130.3-2(c).

In accordance with 43 CFR §4130.8-1(f): Failure to pay grazing bills within 15 days of the due date specified in the bill shall result in a late fee assessment. Payment made later than 15 days after the due date shall include the appropriate late fee assessment. Failure to make payment within 30 days may be a violation of 43 CFR Sec. 4140.1(b)(1) and shall result in action by the authorized officer under 43 CFR Secs 4150.1 and 4160.1-2 (trespass).

No grazing can be authorized under this grazing lease during any period of delinquency in the payment of amounts due in settlement for unauthorized grazing use.

The lessee shall provide reasonable administrative access across private and leased lands to the BLM for the orderly management and protection of the public lands, as outlined in 43 CFR § 4130.3-2(h).

It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on the public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objectives of cultural patrimony the permittee is to stop activities that might disturb such materials and notify the field office manager immediately.

**Tables 10. Current Grazing Lease for Active Use within the Woodward T. allotment.**

| Allotment/ Pasture Name | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs |
|-------------------------|------------------|-----------|--------|------|------|-------------------|----------------------------|----------|
|                         |                  | Number    | Kind   | On   | Off  |                   |                            |          |
| Woodward T.             | 06835            | 60        | Cattle | 5/15 | 7/14 | 120               | 73                         | 30       |
| Totals:                 |                  |           |        |      |      | 120               |                            | 30       |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the allotment.

### **Current Grazing Lease Terms & Conditions within the Woodward T. allotment.**

You are required to submit actual use each year after the end of grazing.

It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on the public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objectives of cultural patrimony the permittee is to stop activities that might disturb such materials and notify the field office manager immediately.

**Tables 11. Current Grazing Lease for Active Use within the Jolley H.<sup>2</sup> allotment.**

| Allotment/ Pasture Name  | Allotment Number | Livestock |                     | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs |
|--------------------------|------------------|-----------|---------------------|------|------|-------------------|----------------------------|----------|
|                          |                  | Number    | Kind                | On   | Off  |                   |                            |          |
| Jolley H/Twelvemile Crk  | 06831            | 100       | Cattle <sup>3</sup> | 6/1  | 8/10 | 220               | 26                         | 61       |
| Jolley H/Flag Crk        | 06831            | 100       | Cattle              | 8/11 | 9/30 | 168               | 15                         | 25       |
| Jolley H/Twelvemile Crk* | 06831            | 100       | Cattle              | 10/1 | 10/3 | 10                | 26                         | 3        |
| Totals:                  |                  |           |                     |      |      | 398               |                            | 89       |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the pasture/allotment.

<sup>2</sup> DOI-BLM-CO-N050-2016-0082-DNA analyzed minor flexibility during the grazing year from the approved grazing application that does not require approval by the authorized officer, however prior notification of the change(s) is required. The flexibility limited to on and off dates and the number of animals to adjust for changing climatic conditions, forage variability, and operational needs. Flexibility is limited to ten days on either side of the on or off dates provided total days of use do not exceed ten days from the schedule approved in the grazing authorization. The number of animals may also be adjusted from the approved grazing application provided the total AUMs used does not exceed the AUMs scheduled. Annual flexibilities will be reflected in Actual Use forms submitted within two weeks from the end of the permitted grazing period.

<sup>3</sup>It was assumed that approximately 50 percent of the herd would be cow/calf pairs and bulls; and the remaining 50 percent would be yearling cattle. Yearling livestock utilization was calculated at 75 percent, therefore the actual AUM realized on the allotment would be less than what was listed.

\*Cattle are gathered and trailed back through the Twelvemile Creek pasture in order to put the livestock on semi-trucks to haul to the permittee's residence in Rifle, CO.

### **Current Grazing Lease Terms & Conditions within the Jolley H. allotment.**

It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on the public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objectives of

cultural patrimony the permittee is to stop activities that might disturb such materials and notify the field office manager immediately.

**Table 12. Current Grazing Lease for Active Use within the Petrolite<sup>2</sup> allotment.**

| Allotment/ Pasture Name | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs  |
|-------------------------|------------------|-----------|--------|------|------|-------------------|----------------------------|-----------|
|                         |                  | Number    | Kind   | On   | Off  |                   |                            |           |
| Petrolite               | 00055            | 100       | Cattle | 5/1  | 5/20 | 66                | 44                         | 29        |
| Petrolite               | 00055            | 100       | Cattle | 8/26 | 9/20 | 85                | 44                         | 38        |
| <b>Totals:</b>          |                  |           |        |      |      | <b>151</b>        |                            | <b>67</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the allotment.

<sup>2</sup> The grazing lease for the Jolley H. allotment was last renewed with DOI-BLM-CO-N050-2016-0082-DNA. At the time of analysis, the Petrolite allotment was the North Pasture (Pasture #1) of the Jolley H. allotment. The DNA document provided minor flexibility during the grazing year from the approved grazing application that does not require approval by the authorized officer, however prior notification of the change(s) is required. The flexibility is limited to on and off dates and the number of animals to adjust for changing climatic conditions, forage variability, and operational needs. Flexibility is limited to ten days on either side of the on or off dates provided total days of use do not exceed ten days from the schedule approved in the grazing authorization. The number of animals may also be adjusted from the approved grazing application provided the total AUMs used does not exceed the AUMs scheduled. Annual flexibilities will be reflected in Actual Use forms submitted within two weeks from the end of the permitted grazing period.

### **Current Grazing Lease Terms & Conditions within the Petrolite allotment.**

It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on the public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objectives of cultural patrimony the permittee is to stop activities that might disturb such materials and notify the field office manager immediately.

### **2.1.2. Existing Range Improvements**

Known existing range improvements located within the LO7 Group allotments consists of two springs, three water troughs, 10 ponds/reservoirs, 2 cattle guards and 18.5 miles of mapped allotment fences. WRFO is aware this list of existing improvements is not all inclusive. As time goes on existing projects will be digitized and incorporated into the range improvement project system. Currently this is the best available data/list of existing improvements.

Existing improvements will either be maintained by the permittee/lessee(s) authorized to graze the allotment or in rare circumstances by the BLM. Some examples of maintenance actions include annual fence work to keep fences clear of brush, functional and cattle tight; equipment use to remove sediment from ponds; equipment use to re-develop spring sources, replace water lines, troughs, and storage. Disturbance associated with maintenance actions will be kept within existing footprints of disturbance areas, including access routes. These routes are occasionally traveled and typically do not result in resource concerns. Where herbaceous vegetation is heavily disturbed by maintenance actions a BLM recommended seed mix will be applied at the

appropriate time of year and noxious weeds will be inventoried and controlled. Prior to maintaining existing range improvement projects, the permittee/lessee must notify the BLM of their intent so the BLM can verify or complete adequate cultural surveys.

## **2.2. Alternative B- Modified Grazing Schedule (Proposed Action)**

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### **2.2.1. Grazing Authorization Schedule**

Alternative B will provide all grazing authorizations of the LO7 Group with ON and OFF date flexibilities, the flexibilities are explained in detail below in Section 2.2.2. Design Features. The proposed changes in season of use would give the permittee/lessee increased flexibility in how livestock are managed on both private and public lands within the allotments. This would allow the permittee/lessee to make changes based on annual variation and changing environmental conditions through adaptive management. Adaptive management is a decision process that promotes flexible decision making that can be adjusted based on natural variability. Adaptive grazing management allows for the integration of proactive drought planning strategies in a manner that can enhance rangeland resilience (Derner and Augustine 2016). A plan of operation would be developed by the permittee/lessee and the BLM prior to turnout. Any pasture rotations necessary to ensure that the minimum rest requirement (period of no livestock grazing) would be incorporated in the plan of operation to ensure continued conformance with Colorado Livestock Grazing Management Guidelines (RMP C-3). The minimum rest periods recommended in the ROD/RMP (RMP-2-25) are management guidelines designed to prevent continuous growing season long grazing use by livestock on most allotments. Standard Terms and Conditions (Appendix C) and the allocated AUMs for the LO7 Group will remain the same as in Table 1 of Section 1.1.1. Additional terms and conditions applicable to the LO7 Group can be referenced in Appendix D.

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### **2.2.2. Design Features**

Annually, no less than 30 days prior to turnout, the permittee/lessee will, through documented discussion with the assigned BLM range specialist and landowner, submit a plan of operation (grazing application) for the grazing year to the BLM for approval. The number of animals may fluctuate to adjust for changing climatic conditions, forage variability, and operational needs as long as grazing use would not exceed scheduled AUMs within the allotment or utilization thresholds.

Annual flexibilities will be reflected in Actual Use forms submitted within fifteen days after completion of their grazing use.

Flexibilities that require approval by the BLM are adjustments made beyond the above criteria. BLM-approved flexibilities and/or changes to this plan may be required due to such factors as forage influences from grazing, drought, fire, and/or water availability.

**Tables 13. Proposed Grazing Permit for Active Use within the La Grange R.<sup>2</sup> allotment.**

| Allotment Name                | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs   |
|-------------------------------|------------------|-----------|--------|------|------|-------------------|----------------------------|------------|
|                               |                  | Number    | Kind   | On   | Off  |                   |                            |            |
| La Grange R/La Grange Pasture | 06825            | 20        | Cattle | 3/1  | 2/28 | 240               | 100                        | 240        |
| La Grange R/La Grange Pasture | 06825            | 1         | Cattle | 3/1  | 8/31 | 5                 | 100                        | 5          |
| La Grange R/Riparian Pasture  | 06825            | 1         | Cattle | 7/15 | 9/13 | 2                 | 100                        | 2          |
| <b>Totals:</b>                |                  |           |        |      |      | <b>247</b>        |                            | <b>247</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the allotment.

<sup>2</sup> The LaGrange R., LO7 Hill, and West Amick allotments are currently issued to the same family under two grazing authorizations. In order to better facilitate livestock movement and orderly administration of the range, livestock trailing across the La Grange R. allotment would occur over a 1-3 day period with prior coordination and approval by the BLM Authorized Officer.

**Tables 14. Proposed Grazing Lease for Active Use within the Amick allotment.**

| Allotment Name  | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs  |
|-----------------|------------------|-----------|--------|------|------|-------------------|----------------------------|-----------|
|                 |                  | Number    | Kind   | On   | Off  |                   |                            |           |
| Amick/Tomlinson | 06824            | 12        | Cattle | 3/1  | 2/28 | 145               | 8                          | 12        |
| Amick/ Middle   | 06824            | 14        | Cattle | 3/1  | 2/28 | 164               | 14                         | 24        |
| <b>Totals:</b>  |                  |           |        |      |      | <b>309</b>        |                            | <b>36</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the pasture/allotment.

**Tables 15. Proposed Grazing Lease for Active Use within the West Amick<sup>2</sup> allotment.**

| Allotment Name          | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs  |
|-------------------------|------------------|-----------|--------|------|------|-------------------|----------------------------|-----------|
|                         |                  | Number    | Kind   | On   | Off  |                   |                            |           |
| West Amick/Copley Place | 02936            | 5         | Cattle | 3/1  | 2/28 | 60                | 25                         | 15        |
| West Amick/Copley Place | 02936            | 1         | Cattle | 3/1  | 3/30 | 4                 | 25                         | 1         |
| West Amick/West Pasture | 02936            | 3         | Cattle | 3/1  | 2/28 | 36                | 100                        | 36        |
| West Amick/West Pasture | 02936            | 2         | Cattle | 3/1  | 8/15 | 11                | 100                        | 11        |
| <b>Totals:</b>          |                  |           |        |      |      | <b>111</b>        |                            | <b>63</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the pasture/allotment.

<sup>2</sup> The LaGrange R., LO7 Hill, and West Amick allotments are currently issued to the same family under two grazing authorizations. In order to better facilitate livestock movement and orderly administration of the range, livestock trailing across the La Grange R. allotment would occur over a 1-3 day period with prior coordination and approval by the BLM Authorized Officer.

**Tables 16. Proposed Grazing Permit for Active Use within the LO7 Hill<sup>3</sup> allotment.**

| Allotment Name              | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs   |
|-----------------------------|------------------|-----------|--------|------|------|-------------------|----------------------------|------------|
|                             |                  | Number    | Kind   | On   | Off  |                   |                            |            |
| L07 Hill/Red Canyon         | 06804            | 11        | Cattle | 3/1  | 2/28 | 135               | 18                         | 24         |
| L07 Hill/Red Canyon         | 06805            | 1         | Cattle | 3/1  | 9/30 | 6                 | 18                         | 1          |
| L07 Hill/Lower Dewey        | 06804            | 14        | Cattle | 3/1  | 2/28 | 169               | 38                         | 64         |
| L07 Hill/Green Sign         | 06804            | 9         | Cattle | 3/1  | 2/28 | 109               | 36                         | 39         |
| L07 Hill/Green Sign         | 06804            | 1         | Cattle | 3/1  | 7/31 | 6                 | 36                         | 2          |
| L07 Hill/Seely <sup>2</sup> | 06804            | 17        | Cattle | 3/1  | 2/28 | 205               | 70                         | 143        |
| L07 Hill/Seely <sup>2</sup> | 06804            | 1         | Cattle | 3/1  | 6/30 | 4                 | 70                         | 3          |
| <b>Totals:</b>              |                  |           |        |      |      | <b>634</b>        |                            | <b>276</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the pasture/allotment.

<sup>2</sup> The Seely pasture was previously documented in BLM records as the Upper Dewey pasture.

<sup>3</sup> The LaGrange R., LO7 Hill, and West Amick allotments are currently issued to the same family under two grazing authorizations. In order to better facilitate livestock movement and orderly administration of the range, livestock trailing across the La Grange R. allotment would occur over a 1-3 day period with prior coordination and approval by the BLM Authorized Officer.

**Table 17. Proposed Grazing Lease for Active Use within the Flag Creek allotment.**

| Allotment Name       | Allotment Number | Livestock |        | Date |       | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs   |
|----------------------|------------------|-----------|--------|------|-------|-------------------|----------------------------|------------|
|                      |                  | Number    | Kind   | On   | Off   |                   |                            |            |
| Flag Creek/Northside | 06816            | 1         | Horse  | 3/1  | 2/28  | 12                | 27                         | 3          |
| Flag Creek/Northside | 06816            | 1         | Horse  | 3/1  | 7/31  | 4                 | 27                         | 1          |
| Flag Creek/Northside | 06816            | 18        | Cattle | 3/1  | 2/28  | 214               | 27                         | 58         |
| Flag Creek/Southside | 06816            | 2         | Horse  | 3/1  | 2/28  | 23                | 34                         | 8          |
| Flag Creek/Southside | 06816            | 1         | Horse  | 3/1  | 11/30 | 9                 | 34                         | 3          |
| Flag Creek/Southside | 06816            | 34        | Cattle | 3/1  | 2/28  | 409               | 34                         | 139        |
| Flag Creek/Southside | 06816            | 2         | Cattle | 3/1  | 9/30  | 14                | 34                         | 5          |
| <b>Totals:</b>       |                  |           |        |      |       | <b>685</b>        |                            | <b>217</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the pasture/allotment.

**Tables 18. Proposed Grazing Lease for Active Use within the Raley R. allotment.**

| Allotment Name | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs  |
|----------------|------------------|-----------|--------|------|------|-------------------|----------------------------|-----------|
|                |                  | Number    | Kind   | On   | Off  |                   |                            |           |
| Raley R        | 06831            | 14        | Cattle | 3/1  | 2/28 | 173               | 17                         | 29        |
| Raley R        | 06831            | 1         | Cattle | 3/1  | 3/30 | 5                 | 17                         | 1         |
| <b>Totals:</b> |                  |           |        |      |      | <b>178</b>        |                            | <b>30</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the allotment.

**Tables 19. Proposed Grazing Lease for Active Use within the West Miller Creek<sup>2</sup> allotment.**

| Allotment Name               | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs   |
|------------------------------|------------------|-----------|--------|------|------|-------------------|----------------------------|------------|
|                              |                  | Number    | Kind   | On   | Off  |                   |                            |            |
| West Miller Creek/West Fork  | 00020            | 16        | Cattle | 3/1  | 2/28 | 195               | 41                         | 79         |
| West Miller Creek/South Moog | 00020            | 13        | Cattle | 3/1  | 2/28 | 154               | 7                          | 11         |
| West Miller Creek/Moyer      | 00020            | 3         | Cattle | 3/1  | 2/28 | 32                | 6                          | 2          |
| West Miller Creek/TI         | 00020            | 15        | Cattle | 3/1  | 2/28 | 165               | 4                          | 7          |
| West Miller Creek/Lower TI   | 00020            | 6         | Cattle | 3/1  | 2/28 | 44                | 2                          | 1          |
| <b>Totals:</b>               |                  |           |        |      |      | <b>590</b>        |                            | <b>100</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the allotment.

<sup>2</sup>There are currently 12 pastures within the West Miller Creek allotment. Only five of those pastures include public lands administered by the BLM. Pastures that do not include BLM administered lands will not be included on the grazing lease.

**Tables 20. Proposed Grazing Lease for Active Use within the Dry Creek allotment.**

| Allotment Name | Allotment Number | Livestock |        | Date |       | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs  |
|----------------|------------------|-----------|--------|------|-------|-------------------|----------------------------|-----------|
|                |                  | Number    | Kind   | On   | Off   |                   |                            |           |
| Dry Creek      | 06829            | 12        | Cattle | 3/1  | 2/28  | 145               | 21                         | 30        |
| Dry Creek      | 06829            | 1         | Cattle | 3/1  | 11/30 | 10                | 21                         | 2         |
| <b>Totals:</b> |                  |           |        |      |       | <b>155</b>        |                            | <b>32</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the allotment.



**Tables 21. Proposed Grazing Lease for Active Use within the Woodward T. allotment.**

| Allotment Name | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs  |
|----------------|------------------|-----------|--------|------|------|-------------------|----------------------------|-----------|
|                |                  | Number    | Kind   | On   | Off  |                   |                            |           |
| Woodward T     | 06835            | 10        | Cattle | 3/1  | 2/28 | 120               | 73                         | 88        |
| <b>Totals:</b> |                  |           |        |      |      | <b>120</b>        |                            | <b>88</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the allotment.

**Tables 22. Proposed Grazing Lease for Active Use within the Jolley H. allotment.**

| Allotment Name          | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs  |
|-------------------------|------------------|-----------|--------|------|------|-------------------|----------------------------|-----------|
|                         |                  | Number    | Kind   | On   | Off  |                   |                            |           |
| Jolley H/Twelvemile Crk | 06831            | 19        | Cattle | 3/1  | 2/28 | 228               | 26                         | 59        |
| Jolley H/Twelvemile Crk | 06831            | 1         | Cattle | 3/1  | 6/30 | 4                 | 26                         | 1         |
| Jolley H/Flag Creek     | 06831            | 14        | Cattle | 3/1  | 2/28 | 165               | 15                         | 25        |
| <b>Totals:</b>          |                  |           |        |      |      | <b>397</b>        |                            | <b>85</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the allotment.

**Table 23. Proposed Grazing Lease for Active Use within the Petrolite allotment.**

| Allotment Name | Allotment Number | Livestock |        | Date |      | Total Active AUMs | % Public Land <sup>1</sup> | BLM AUMs  |
|----------------|------------------|-----------|--------|------|------|-------------------|----------------------------|-----------|
|                |                  | Number    | Kind   | On   | Off  |                   |                            |           |
| Petrolite      | 00055            | 7         | Cattle | 3/1  | 2/28 | 143               | 78                         | 66        |
| Petrolite      | 00055            | 1         | Cattle | 3/1  | 3/31 | 2                 | 78                         | 1         |
| <b>Totals:</b> |                  |           |        |      |      | <b>145</b>        |                            | <b>67</b> |

<sup>1</sup> Note: Percent public land reflects the amount of forage produced on public land compared to the total amount of forage produced on all public and owned/controlled lands in the allotment.

The LaGrange R., LO7 Hill, and West Amick allotments are currently issued to the same family under two grazing authorizations. In order to better facilitate livestock movement on their private property and orderly administration of the range, livestock trailing would occur with prior coordination and approval by the BLM Authorized Officer. This primarily affects the LaGrange R. allotment where livestock trail to/from the LO7 Hill allotment. Grazing use would not result in the adjudication of grazing preference. Trailing would be limited to no more than three days.

### ***2.2.3. Range Improvement Projects Needed to Implement Proposed Action***

Implementation of the grazing schedules in Alternative B would require the use and maintenance of all the existing range improvements previously identified in Section 2.1.2 of this document, as

control of livestock is necessary to implement the proposed grazing schedules. No new range improvement projects are proposed at this time.

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#### **2.2.4. Thresholds and Responses to Drought Conditions**

Under this alternative, when there are indications of below normal precipitation, the permittees or lessees and the BLM would assess local conditions and outlooks to determine what adjustments are needed (including, but not limited to, pasture deferment, rest, modified livestock grazing rotation, change in livestock numbers). The Drought Monitor is produced weekly and classifies drought severity into major categories (Svoboda et al. 2002). Although drought identification would be based on the Drought Monitor, actual management actions and procedures would be based on site-specific conditions within the allotment as shown in Appendix B Table B1. Procedures for drought related adjustments to livestock grazing would be consistent with BLM IM 2013-094 Resource Management During Drought.

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#### **2.2.5. Grazing Permit Terms and Conditions**

Livestock grazing permits and leases must specify terms and conditions pursuant to 43 CFR § 4130.3, § 4130.3-1, and § 4130.3-2. The standard terms and conditions applicable to all permits and leases are listed in Appendix C.

Livestock grazing permits may also contain site-specific terms and conditions “determined by the authorized officer to be appropriate to achieve management and resource conditions objectives”, to ensure conformance with Colorado Public Land Health Standards and Fundamentals of Rangeland Health, and to “assist in the orderly administration of the public rangelands” (43 CFR § 4130.3, § 4130.3-2, §4180.2). These conditions address additional limitations such as where to place supplements, utilization levels, annual operating plans, actual use records, and protections for cultural resources. Appendix D and E lists design features that would additionally apply to Alternative B.

### **2.3. Alternative C- No Livestock Grazing**

Grazing applications for permit/lease renewals for these allotments would be denied. No authorized livestock grazing would occur on public lands within the LaGrange R., Amick, West Amick, LO7 Hill, Flag Creek, Raley R., West Miller Creek, Dry Creek, Woodward T., Jolley H., and Petrolite allotments. The current/expiring grazing authorizations for these allotments would be cancelled or would not be renewed. The private property within the allotments would continue to be grazed by livestock. Existing range improvements would not be maintained or removed. As Colorado is a fence out state, additional boundary fencing could be required to prevent unauthorized use of public lands.

## **2.4. Alternatives Considered but Eliminated from Detailed Analysis- No Livestock Grazing and Removal of Range Improvement Projects**

The BLM would not authorize livestock grazing (passive restoration) and would provide for active restoration and removal of all range improvement projects (such as fences and water developments) in the allotment and reclamation of access routes to those facilities. The BLM eliminated this alternative from detailed analysis since the allotment is available for livestock grazing (ROD/RMP) and removal of all range improvement projects within the allotment would hinder the BLM's ability to administer livestock grazing within the allotment. Range improvements are necessary for livestock grazing since fences serve to control livestock movements between pastures/allotments and water developments help to promote distribution of livestock (and associated forage consumption) within pastures/allotments.

The BLM has the authority to renew livestock grazing permits and leases consistent with the provisions of the *Taylor Grazing Act*, *Public Rangelands Improvements Act*, *Federal Land Policy and Management Act*, and White River Field Office's *Record of Decision and Resource Management Plan*. This plan includes the *Colorado Public Land Health Standards* and the *Guidelines for Grazing Management*.

The BLM is to manage the public lands on the basis of multiple use and sustained yield unless otherwise specified by law (Sec. 102 (a)(7) FLPMA). The BLM WRFO will process permittee/lessee requests to relinquish their grazing permit/lease and preference consistent with BLM IM 2013-184. At this time, no such requests have been submitted. This alternative was eliminated from detailed analysis.

## **2.5. Alternatives Considered but Eliminated from Detailed Analysis- Reduced Grazing Alternative**

The LO7 Group allotments are meeting all upland Land Health Assessment Standards and riparian PFC Standards. Current grazing conforms with the guidelines for livestock grazing management practices. A reduced grazing alternative for resource objectives is not necessary.

# **3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS**

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## **3.1. Assumptions for Analysis**

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### **3.1.1. Livestock Use**

For purposes of the analysis in this EA, the BLM assumed that the permittees would use their full preference (total active AUMs) each year of the 10-year permit and the 40-60 percent utilization standard described in the ROD/RMP (carried forward from the 1981 White River Grazing Management EIS) would not be exceeded. However, the BLM acknowledges that the

permittee may actually use less AUMs in a given year than the full permitted number for a variety of reasons and, for this reason, the actual utilization levels may be less than 50 percent. The BLM will review annual adjustments including applications for nonuse consistent with 43 CFR §4130.2(g). It is outside of the scope of this EA analysis to consider changes to utilization levels from the ROD/RMP (RMP 2-13).

The feeding of nutritional supplements may occur. Supplements (e.g., mineral blocks or granular minerals in tubs) are intended to supply necessary nutritional needs of livestock that are not provided by the available natural forage. Supplements are not intended to provide baseline nutritional needs nor to allow for a greater number of animals than what can be supported by the allocated portion of the natural forage. It is assumed that most livestock forage use would be concentrated around water sources and that most trails would be located along fence lines.

## **3.2. Issue #1 Public Land Health Standard #2- Riparian Systems**

### ***3.2.1. How would livestock trailing, and grazing affect the vegetation and channel function of Flag Creek and its ability to meet Public Land Health Standard 2?***

#### **Affected Environment**

The only perennial stream supporting a riparian system occurring on BLM administered land on the LO7 Group is the main channel of Flag Creek. This quarter mile section of Flag Creek is located on the Jolley H. allotment and was last assessed in August of 2022. The portion of Flag Creek's PFC assessment to have all necessary components present for a functional riparian system and is properly functioning. Perennial riparian systems associated with both running and standing water, need to function properly to recover from major disturbance such as fire, severe grazing, or 100-year floods. Riparian vegetation captures sediment, provides forage, habitat, biodiversity and can improve water quality.

The portion of Flag Creek on BLM administered land exhibited a flood plain that is inundated in relatively frequent events, has a hydrologic sinuosity, width/depth ratio, and gradient that is in balance with the landscape setting. The riparian zone of this stretch has achieved potential extent and exhibited no impairments from upstream. The assessment noted some entrenchment and isolated ungulate induced bank shearing. Vegetative cover was prevalent along the stream banks with adequate diversity and stabilization. Plant communities capable of withstanding moderately high streamflow events and stabilizing riparian vegetation were present. There were many large mature willows in the area and few young willows. In addition, an acceptable diversity of obligate riparian species such as dense sedges, rushes, *Epilobium* and speedwell were present. Overall, the system is functioning properly. Observed entrenchment and cutting appeared static and unchanged since 2015. The current level of grazing is not causing negative impacts and is considered sustainable.

### **Reasonably Foreseeable Environmental Trends and Planned Actions in Area**

The Flag Creek riparian system has been rated as properly functioning from a 2015 and 2022 survey. The system has functioned properly despite several years of moderate and severe drought during that period (Appendix A Figure 7). This demonstrates the riparian systems resilience to reasonably foreseeable environmental conditions. These expected conditions include continued drought, and changes in precipitation regimes. Increased winter precipitation and warmer, drier summers are likely to continue. These trends have potential to impact riparian communities as well as increase wildfire risk to the area.

Planned actions in the area primarily include continued grazing of livestock. Other actions likely to continue in the area include wildfires, some dispersed camping, hunting and recreation.

### **Environmental Impacts Alternative A- Continuation of Current Management**

The systems current health has shown resilience under current grazing practices despite variable drought conditions in the region (Appendix A Figure 7). The current level of grazing from livestock and wildlife use appears to be sustainable for this system. Continuation of the current management is not anticipated to result in degradation of present riparian conditions.

### **Environmental Impacts Alternative B- Modified Grazing Schedule**

The proposed action, Alternative B introduces a flexible grazing schedule that allows the grazing permittee and rangeland specialist the ability to respond to changing environmental conditions. This adaptive management practice has the potential to improve or maintain the current condition of the Flag Creek riparian area. Actively responding to changing conditions, for example turning out later if forage growth is stunted due to drought conditions, could be a useful tool in response to changing precipitation regimes.

### **Environmental Impacts Alternative C- No Livestock Grazing**

Removal of livestock would allow for complete expression of riparian vegetation throughout the growing season. Improvements in distribution and density of riparian plants may be possible, resulting in improved bank stability, decreased erosion, and improvements in the system's ability to capture sediment. Wildlife grazing and trampling would continue, which may affect riparian communities.

## **3.3. Issue #2\_Public Land Health Standard #3 – Plant and Animal Communities**

### ***3.3.1. How would livestock grazing and trailing affect plant vigor and upland plant community composition?***

#### **Affected Environment**

Ecological sites within the grazing allotments includes brushy loam, pinyon/juniper, loamy slopes, mountain loam, deep loam, rolling loam, mountain swale, foothill swale, deep clay loam, clayey slopes, aspen woodland, stony foothills, and lodgepole pine woodlands. The WRFO uses

the NRCS soil surveys and associated range site descriptions to infer potential plant communities within allotments. Species associated with these ecological sites is provided below.

Brushy Loam sites: Serviceberry, oak brush, snowberry, mountain brome, slender wheatgrass, western wheatgrass, Letterman's and Columbia needle grasses

Pinyon/Juniper sites: beardless bluebunch wheatgrass, western wheatgrass, June grass, Indian rice grass, mutton grass, Pinyon pine, Utah juniper, mountain mahogany, bitterbrush, serviceberry, and Wyoming big sagebrush

Loamy Slopes sites: beardless bluebunch wheatgrass, western wheatgrass, June grass, Indian rice grass, mountain mahogany, bitterbrush, serviceberry, and mountain big sagebrush

Mountain Loam sites: Mountain brome, slender wheatgrass, western wheatgrass, Letterman and Columbia needle grasses, mountain big sagebrush, bitterbrush, snowberry, serviceberry

Deep Loam sites: Bluebunch wheatgrass, mutton grass, needle-and-thread, western wheatgrass, slender wheatgrass, big sagebrush, serviceberry, snowberry.

Rolling Loam sites: Wyoming big sagebrush, winterfat, low rabbitbrush, horsebrush, bitterbrush, western wheat grass, Indian rice grass, squirreltail, June grass, Nevada and Sandberg bluegrass

Mountain Swale sites: Basin wildrye, slender wheatgrass, western wheatgrass, Letterman and Columbia needle grasses, sedges, rushes, mountain big sagebrush, rubber rabbitbrush, snowberry

Foothill Swale sites: Basin wildrye, western wheatgrass, slender wheatgrass, streambank wheatgrass, Indian rice grass, Sandberg bluegrass, basin big sagebrush, four-wing saltbush

Deep Clay Loam sites: Western wheatgrass, slender wheatgrass, mutton grass, squirreltail, June grass, Letterman and Columbia needle grasses, mountain big sagebrush

Clayey Slope sites: Salina wildrye, mutton grass, western wheatgrass, June grass, squirreltail, shadscale

Aspen Woodland sites: aspen, blue wildrye, mountain brome, Columbia needle grasses, Serviceberry, rose species, Chokecherry, snowberry, meadow rue, bracken fern, Oregon grape, sedges

Stony Foothills sites: Beardless bluebunch wheatgrass, western wheatgrass, needle-and-thread, June grass, Indian rice grass, fringed sage, Wyoming big sagebrush, black sage, serviceberry, pinyon and juniper

Lodgepole Pine Woodlands sites: lodgepole pine, wild blueberry, serviceberry, chokecherry, snowberry, elk sedge, mountain brome, Douglas fir

Currently all upland vegetation on the allotments is healthy, productive, and vigorous. Steeper slopes are dominated by mixed-mountain shrub, oakbrush, or pinyon-juniper woodlands plant communities. These sites tend to be less accessible to livestock and generally produce far less forage than shrub-dominated communities, but they provide important wildlife habitat.

### **Reasonably Foreseeable Environmental Trends and Planned Actions in Area**

Environmental trends most likely to affect vegetation throughout the allotments, include climate change with continued drought. The 2015 BLM WRFO Oil and Gas Development Proposed RMP Amendment/Final EIS for Oil and Gas Development in the White River Field Office, Colorado; Chapter 4; Environmental Consequences (page 4-629) summarized potential predicted climate changes. Increased winter precipitation along with decreased spring and summer precipitation, increased prevalence, severity, and duration of droughts, and increased fire frequency, size, and intensity are all likely in the region.

Increased winter precipitation tends to favor deeper rooted woody vegetation. Decreased spring and summer precipitation will negatively affect native perennial forage species. Increased drought conditions will likely cause increased stress and mortality to native vegetation, causing shifts in plant community composition. Increased fire activity has the potential to cause large scale conversion of seral stage and associated plant community composition of affected areas.

According to the U.S. Drought Monitor (NOAA, 2022) both Rio Blanco County, Colorado and Garfield County, Colorado have experienced intermittent periods of some level of drought and normal moisture over the past 20 years. The Society for Range Management has defined drought as receiving 75 percent or less precipitation than the long-term average (SRM 1989). Periods of Moderate, Severe, or Exceptional drought persisted from 2002 – 2007, 2012 – 2013, 2015, 2018, and 2020-2022. The trend shows increasing frequency and severity of drought (see graphs in Appendix A, Figure 7). Despite this trend, plant community vigor, diversity, and production are appropriate for the soils and climactic conditions on the allotments.

Livestock grazing is a well-established economic use of public and private lands throughout the region dating back to European settlement. This area has provided recreational benefit to the community for decades. The off-highway vehicle (OHV) “open play” area was constructed for motorized use within the LaGrange R. allotment. Hunting and recreation on private land provides an economic stimulus for private landowners and the community. There is no indication that this trend would not continue and no significant changes to land use are foreseeable. CPW started a program in 1986 with the intent to improve public hunting access to private land and to form a wildlife management partnership with participating landowners. The program is voluntary, but one of the BLM grazing leases is issued to a participating ranch. The West Miller Creek allotment is currently grazed in a manner to enhance wildlife habitat and meet Data Analysis Unit (DAU) objectives as part of this agreement.

Coordinated Resource Management Plans (CRMPs) are being developed for ranches throughout the WRFO. The basic concept is that coordinated management, planning, and implementation of field activities occur across ownership or management boundaries. The CRMP is a planning document that encompasses conservation practices, wildlife improvement practices, and restoration practices. Grazing authorizations that provide flexible seasons of use can easily

incorporate desired changes as outlined in CRMPs to achieve resource objectives across the landscape. The process is designed to be flexible and address specific situations and contain practical and recommended actions. A CRMP is currently being developed on the LaGrange R. allotment but has not been finalized.

The LaGrange R., LO7 Hill, and West Amick allotments are currently issued to the same family under two grazing authorizations. All three allotments may be grazed with one herd using a high intensity, short duration grazing rotation in the foreseeable future. The incorporated design features would ensure that the livestock producers have adequate flexibility to change livestock management without additional analysis while also meeting resource objectives on the allotments. In order to better facilitate livestock movement and orderly administration of the range, livestock trailing across the La Grange R. allotment would occur over a 1-3 day period with prior coordination and approval by the BLM Authorized Officer.

### **Environmental Impacts Alternative A- Continuation of Current Management**

Current livestock grazing use has not impaired any of the numerous range sites within the allotments. No adverse effects are anticipated if current conditions would continue. All Land Health Standards are met. Rangeland vegetative composition and species diversity has been maintained. Total forage allocation on the allotments has not exceeded appropriate stocking rates even with yearling conversions on several allotments. Authorization terms and conditions have been applied inconsistently on each allotment through site specific analysis and activity plans. Those terms and conditions would remain in effect. The areas with weedy annual species would be expected to persist. The percent public land on allotments would not be adjusted to reflect changes in private property ownership by non-permittees and allotment boundaries would not be modified. Season of use dates and flexibility would remain the same, changes based on annual variation and changing environmental conditions would not be made through adaptive management. Average utilization levels by livestock identified in the ROD/RMP (RMP 2-13) would not be included on all grazing permits or leases as a term and condition. If drought impacts should result in reduced vigor of the plant communities, management responses described in Appendix B could not be applied. Overall, there would be no cumulative effects as a result of the proposed action.

### **Environmental Impacts Alternative B- Proposed Grazing Schedule**

Under this alternative, livestock grazing use would occur in a manner similar to previous grazing practices. The impacts from livestock grazing would continue at the same level as previously authorized. The most recent Land Health Assessment showed that grazing allotments are meeting Public Land Health Standard 3 with current grazing by cattle and horses. The renewed authorizations would allow for effectively the same usage, while allowing the permittee/lessee to make changes based on annual variation and changing environmental conditions. The proposed changes in the season of use would provide increased flexibility for livestock management on both private and public lands within the allotments. This flexibility would help to maintain a robust and healthy plant community and provide for ecological resilience. Stocking rate and degree of forage utilization or intensity of grazing have more influence on vegetation than the season of grazing and rotation schedules (Heady and Child, 1994). Grazing use would not occur



in the winter because of snow cover. A plan of operation would be developed by the permittee/lessee and the BLM prior to turnout. Any pasture rotations necessary to ensure that the minimum rest requirement (period of no livestock grazing) or limits on spring grazing until after the critical growth period would be incorporated in the plan of operation to ensure continued conformance with Colorado Livestock Grazing Management Guidelines. Sufficient rest and growth would allow perennial plants an opportunity to meet their physiological and reproductive needs. Resulting in healthy rangelands that are capable of supplying forage at a sustained yield. Average utilization levels by livestock identified in the ROD/RMP (RMP 2-13) would be included on grazing permits and leases as a term and condition. In nearly all situations, the application of guidelines (utilization levels) should ensure protection of soil and vegetation resources as well as maintenance of livestock performance and wildlife habitat (Holechek et al. 1998). Management responses described in Appendix B would be applied when there are indications of below normal precipitation. Local conditions would be assessed to determine what adjustments are needed (including, but not limited to, pasture deferment, rest, modified livestock grazing rotation, change in livestock numbers) to respond to drought conditions. The areas with weedy annual species would be expected to persist without livestock inputs.

### **Environmental Impacts Alternative C- No Livestock Grazing**

The no grazing alternative would result in a reduction of grazing impacts such as forage consumption, crushing and trampling of vegetation. It would be expected that perennial plants would show an increase of cover and that litter cover of soil would increase given average precipitation regimes. Removal of livestock grazing would allow for complete herbaceous expression throughout the entire growing season. Most sites currently being grazed by cattle and horses would become overgrown and dense. This overabundance of vegetation would in turn increase fine fuels and increase the risk for wildfire.

In the areas where annual weedy species are present, they could transition over time to being dominated by perennial species or the weedy location could expand and overtake once healthy range sites. Native ungulates currently graze these allotments throughout the year. Healthy rangelands would still be capable of supplying forage at a sustained yield. In the absence of domestic livestock, native ungulates may increase concentration on public lands. Rotational grazing systems have been recommended on ungulate winter range to conserve essential winter forage for ungulates (Shamhart et al. 2012).

Existing range improvements would not be maintained or removed. Private lands within the LO7 Group allotments would continue to be grazed and due to the land ownership configuration, there would be no benefit to public lands associated with livestock administration. Administrative actions undertaken by the BLM under 43 CFR § 4150 (Unauthorized Grazing Use) would likely increase without valid grazing authorizations. Additional boundary fencing may be required to prevent unauthorized use of public lands. Current upland vegetative conditions do not warrant implementation of this alternative.

### **3.4. Issue #3 Public Land Health Standard #3 – Plant and Animal Communities**

#### ***3.4.1. How would livestock grazing impact plant communities that provide forage for big game species?***

##### **Affected Environment**

All the allotments are located in Game Management Unit (GMU) 23, which is one of several GMUs that make up the White River Elk Herd DAU E-6. CPW's 2005 elk management plan provides information on herd population trends and management issues. Issues of concern identified for the White River Elk Herd DAU E-6 are primarily associated with elk distribution, winter range habitat capability, and early spring elk use on public lands as elk migrate back to summer ranges. The 2021 post hunt elk population estimate was roughly 40,500, which is slightly above the preferred population objective of 32,000 – 39,000 animals.

CPW's 2020 mule deer management plan provides information on herd population trends and management issues of White River Deer Herd (DAU D-7). Issues of concern identified for this deer herd included poor range conditions (particularly on winter ranges), drought, large-scale wildfires, and disease. The 2021 post hunt mule deer population objective was roughly 32,300, which is within the preferred population objective of 25,000 – 35,000 animals.

The LO7 Group encompass a variety of elevations (6,500 – 8,800 ft) and vegetation communities that provide year-round habitat for both elk and mule deer. Mule deer and elk winter range, winter concentration areas, and severe winter range, as mapped by CPW occurs in the lower elevation portions these allotments. Severe winter range, by definition, is the part of overall winter range where 90 percent of the individuals are located when the annual snowpack is at its maximum and/or temperatures area at a minimum in the two worst winters out of ten. Higher elevation aspen/fir, wet meadow, and mixed mountain shrub communities support mule deer and elk throughout the summer months and provide important fawning and calving habitat. In general, diverse plant communities comprised of high quality native perennial grasses and forbs are most beneficial for big game species. Aspen groves and associated meadows provide high quality forage, spring through fall and the mountain shrub community is very important for both food and cover for wintering mule deer. This area generally supports elk throughout the winter months and provides both winter and summer habitat for mule deer.

BLM administered lands on the LO7 Group allotments are either relatively small, isolated parcels or largely inaccessible due to rugged terrain. Land health assessments and ocular observations were conducted on the allotments by BLM staff in 2022. In general, all allotments in this group were meeting Standard 3 for animal communities. Plant communities showed minimal departure from expected conditions in the allotment's key forage areas. Native perennial grasses were noted as being diverse and vigorous. Deciduous browse, as a source of forage and

cover was abundant. Areas of localized weeds (cheatgrass, musk thistle, Canada thistle, houndstongue, burdock, and Russian knapweed) were noted at some sites, but is not thought to detract from continued meeting of Standard 3 on a landscape scale.

### **Reasonably Foreseeable Environmental Trends and Planned Actions in Area**

Reasonably foreseeable environmental trends and planned actions were discussed in detail in Section 3.3.1. Environmental trends in the area relevant to big game populations includes climate change with continued drought, variation in precipitation regimes, increased fire frequency, size, and intensity. These environmental trends have the potential to influence native vegetation causing shifts in plant community composition and habitat. Increased fire activity has the potential to cause large scale conversion of seral stage and associated plant community composition of affected areas. Plant communities have displayed appropriate vigor and production despite several years of moderate and severe drought (Appendix A Figure 7). The off-highway vehicle (OHV) “open play” area was constructed for motorized use within the LaGrange R. allotment. Livestock grazing and recreational uses such as hunting and motorized OHV travel are the two main uses in the project area that have the potential to influence big game populations and habitat.

### **Environmental Impacts Alternative A- Continuation of Current Management**

Current livestock use occurs from spring through late fall across the LO7 Group and is coincident with mule deer, and to a lesser degree elk occupation. Incremental reductions in herbaceous cover would be expected, particularly in areas more accessible to livestock or near water sources. This would likely be most evident in the Flag Creek, LO7 Hill, LaGrange R. and West Amick allotments that have larger, more accessible parcels of BLM. Much of the BLM administered parcels in these allotments occur on steep, mountain shrub dominated slopes that are used less frequently by livestock. Based on the most recent land health assessments/allotment monitoring data, there was no indication of any big game and livestock forage conflicts on BLM administered lands. As noted in the land health determinations, the herbaceous understory was diverse and abundant and comprised of native grasses and forbs. Deciduous browse, as a source of forage and cover for big game was abundant and diverse. Several weedy species were noted during allotment inspections, however due to the localized nature of their occurrence, they are not thought to detract from overall big game habitat quality. Current livestock use on BLM administered lands in these allotments appears to be compatible with continued support of big game species.

### **Environmental Impacts Alternative B- Modified Grazing Schedule**

This alternative would continue to authorize livestock grazing in a manner similar to current grazing practices. This alternative would eliminate specified ON/OFF dates for each allotment allowing greater flexibility in responding to annual environmental conditions or grazing issues. The addition of Terms and Conditions, as described in Appendix D including adherence to utilization levels, reporting of actual use, and incorporating pasture rotation to ensure that growing season rest is provided. This alternative would be expected to benefit vegetation communities that provide habitat for big game species. Thresholds and responses for drought as

outlined in Appendix B would also benefit rangelands in continued support of big game. The proposed grazing system is not expected to detract from continued meeting of Standard 3 as habitat conditions would likely remain stable or improve under this alternative.

### **Environmental Impacts Alternative C- No Livestock Grazing**

Removal of livestock would largely allow for complete expression of herbaceous vegetation throughout the entire growing season. Year-round use by big game species would still occur across these allotments. The amount of forage available for big game would be expected to increase to some degree under the no grazing alternative.

## **3.5. Issue #4 Public Land Health Standard #3/4 – Plant and Animal Communities/ Special Status Species**

### ***3.5.1. How would livestock trailing and grazing affect forage and nesting cover for migratory birds, greater sage-grouse, and Columbian sharp-tailed grouse?***

#### **Affected Environment**

##### **Greater Sage-Grouse**

The LaGrange R., Amick, West Amick, LO7 Hill, Flag Creek, Dry Creek, and West Miller Creek allotments are in a mapped GRSG general habitat management area (GHMA), which is defined as areas of seasonal or year-round habitat outside of priority habitat. Together, the allotments comprise 2,660 acres of BLM administered GHMA, of which only about 600 acres (confined largely to the LaGrange R. and West pasture of the West Amick allotments) could support grouse. BLM administered parcels in the LO7 Group are almost entirely comprised of mixed mountain shrub or pinyon-juniper woodlands resulting in naturally fragmented habitat. Sagebrush communities are small in extent and discontinuous.

GRSG populations generally require large expanses of intact sagebrush habitat (Connelly et al. 2004). GRSG nests are generally found under shrubs with larger canopies and within stands of greater shrub canopy cover (Connelly et al. 2000). Height and structure of herbaceous vegetation is an important component in nesting habitat and can influence GRSG nest site selection, nest success, and chick survival. Habitat requirements typically vary depending on season of use. Productive nesting areas are typically characterized by continuous sagebrush of the appropriate height and shape, with an understory of native grasses (typically bunchgrasses) and forbs, with a horizontal and vertical structural diversity that provides herbaceous forage for pre-laying and nesting hens, concealment from predators during the nesting period, and an insect prey base. Succulent forbs and mesic areas are important during the summer and late-brood rearing period. Both shrub canopy and grass cover are important for reproductive success. GRSG begin nesting from mid-April through mid-May with chicks appearing from mid-May through mid-July, peaking from mid to late June.

The allotments are associated with the Meeker-White River (MWR) GRSG population. This is a small, isolated population that has typically supported very few birds. There are no active leks on

any of the allotments. There is one active lek associated with this population which is over seven miles from the LO7 Group, and it has shown a steady decline over the past 15 years. Since 2007, no more than 10 males have been documented on the lek. The three-year average (2020 – 2022) is two birds, with no males documented at the lek in 2022. This population has likely been negatively influenced by loss of habitat due to conversion of sagebrush shrublands to agricultural uses (both dryland and irrigated), as well as subdivision of habitat into small parcels for rural housing developments. In the spring of 2010 and 2011, CPW trapped a total of six female GRSG (three in 2010 and three in 2011) at the lek and equipped them with radio transmitters. These birds were monitored from April 2010 through March of 2012. Nearly all the grouse use was concentrated around the lek. Data from this study shows no use by birds in any of the allotments. The nearest documented use was roughly one mile north of the LaGrange R. and West Amick allotments and occurred solely during the winter. BLM administered lands in the LaGrange R. and West Amick have the potential to support GRSG during the breeding season, but because the nearest active lek is over seven miles away, it not likely to be used consistently for nesting purposes. The sagebrush communities in these two allotments are likely to be used more frequently during the late summer and winter months.

As summarized in the Rangeland Health Evaluation, there are no Assessment, Inventory and Monitoring or Landscape Monitoring Framework points on these allotments within mapped GRSG GHMA. No Habitat Assessment Framework assessments have occurred on these allotments, therefore no GRSG seasonal habitat suitability ratings are available.

### **Columbian sharp-tailed grouse**

The Petrolite, Flag Creek, LO7 Hill, Amick, and West Miller Creek allotments have the potential to support Columbian sharp-tailed grouse (CSTG). Approximately 2,083 acres of BLM administered land are located in mapped CSTG overall/winter range. BLM administered lands in these allotments may receive some incidental winter use by CSTG, but they are not thought to support large numbers of CSTG throughout the year, as more suitable and extensive habitats occur east. Portions of the West Miller Creek allotment are in a mapped CSTG production area. Production areas are those areas that include nesting or brood-rearing habitat. The West Miller Creek allotment contain several CSTG leks however, there are no active leks on BLM administered lands (Brian Holmes, CPW; personal communication with BLM Wildlife Biologist, Lisa Belmonte). BLM administered lands in CSTG production areas are limited to two small parcels totaling 67 acres.

### **Migratory Birds**

The allotments encompass a variety of elevational ranges and habitats including big sagebrush, mixed mountain shrub, pinyon-juniper, Gambel oak, and aspen/fir. These vegetation communities provide nesting habitat for a suite of migratory birds during the breeding period (typically May 15 – July 30), as well as other nongame animal species. Migratory birds of conservation concern likely to occur in these allotments include broad-tailed hummingbird, Brewer's sparrow, Cassin's finch, and Virginia's warbler. In general, diverse and productive plant communities provide the appropriate cover and forage resources for migratory bird species to complete reproductive (breeding and brood-rearing) functions.

## **Reasonably Foreseeable Environmental Trends and Planned Actions in Area**

Reasonably foreseeable environmental trends and planned actions were discussed in detail in Section 3.3.1. Environmental trends in the area relevant to game and nongame avian populations includes climate change with continued drought, variation in precipitation regimes, increased fire frequency, size, and intensity. These environmental trends have the potential to influence native vegetation causing shifts in plant community composition and habitat. Increased fire activity has the potential to cause large scale conversion of seral stage and associated plant community composition of affected areas. Plant communities have displayed appropriate vigor and production despite several years of moderate and severe drought (Appendix A Figure 7). Livestock grazing and recreational uses including motorized OHV travel are the two main uses in the project area that have the potential to influence game and nongame avian populations and habitat.

## **Environmental Impacts Alternative A- Continuation of Current Management**

### **GRSG**

BLM administered lands that have the potential to support the reproductive functions of GRSG are limited to the LaGrange R. and West Amick allotments. BLM administered lands on the remaining allotments comprise a small portion of the overall land base, thus limiting influential management. Livestock grazing in the LaGrange R. and West Amick allotments occurs in May and June which is coincident with GRSG nesting and early brood-rearing activities. Although livestock grazing can reduce the amount of cover available for nest concealment and thermal protection, herbaceous vegetation was noted as being diverse and vigorous. BLM administered lands in the allotments are meeting Standard 4 for special status animal species. Based on the most recent monitoring data, current livestock use is not thought to have a substantial influence on GRSG or GRSG habitat.

### **CSTG**

BLM administered lands are likely used by CSTG throughout the winter, with the potential for year-round use in the West Miller Creek allotment (67 acres of BLM). BLM administered lands in these allotments are currently meeting the land health standard for special status species. Current livestock grazing does not appear to negatively influence vegetation communities that support the life functions of CSTG.

### **Migratory Birds**

Current livestock use in the LO7 Group coincides with some portion of the migratory bird nesting period each year. There is potential for minor disruption to nesting activities and some reductions in herbaceous cover, particularly in areas more favored by livestock. Much of the BLM administered lands in these allotments occur on steeper, mountain shrub or pinyon-juniper dominated slopes, that generally receive minimal livestock use. The suite of birds associated with this community type are likely not strongly influenced by current grazing practices. Land health assessments across this group of allotments were meeting Standard 3 for animal communities and did not exhibit a drastic departure from expected conditions. In general, vegetation communities in key forage areas are largely intact and provided appropriate cover for

nest concealment and thermal protection throughout the breeding season. Areas of localized weeds (cheatgrass, musk thistle, Canada thistle, houndstongue, burdock, and Russian knapweed) were noted at some sites, but were not thought to detract from continued meeting of Standard 3 on a landscape scale.

### **Environmental Impacts Alternative B- Modified Grazing Schedule**

This alternative would continue to authorize livestock grazing in a manner similar to current grazing practices. Alternative B's modified grazing schedule would eliminate specified ON/OFF dates for each allotment allowing greater flexibility in responding to annual environmental conditions or grazing issues. This alternative also requires adherence to utilization levels and reporting of actual use and provides an opportunity for pasture rotation, deferment, and rest in those years when environmental conditions are unfavorable (see Appendices B and D). Resource objectives have been carried forward from Table 2-2 of the Northwest CO ARMPA for BLM administered lands in the LaGrange R. allotment and the West pasture of West Amick allotment. These resource objectives are designed to ensure suitable components of GRSG brood-rearing/summer and winter habitat are maintained in ecological sites capable of supporting sagebrush (see Appendix E).

### **Environmental Impacts Alternative C- No Livestock Grazing**

Removal of livestock would largely allow for complete expression of herbaceous vegetation throughout the nesting and brood-rearing/summer season for avian species. This would likely have the greatest benefit to nongame bird species that require more well-developed understories. Livestock removal would not be expected to have a substantial impact on grouse species due to the limited amount of habitat available in the LO7 Group allotments.

## **4. PUBLIC INVOLVEMENT, CONSULTATION AND COORDINATION**

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### **4.1. Public Involvement**

In accordance with 43 CFR § 4130.2(b) and 43 CFR § 4120.5 the WRFO sent letters to affected permittees and lessees on January 26, 2023. These letters requested that any information, issues, concerns, or resource condition information be submitted to the BLM by February 27, 2023. No written responses were received by the BLM WRFO as of March 1, 2023.

This project was posted on the BLM's on-line NEPA register at <https://eplanning.blm.gov/eplanning-ui/project/2023307/510> on February 1, 2023. No written responses were received by the BLM WRFO as of March 13, 2023.

The draft EA has been posted for public comment period on 3/14/2023.

## 4.2. Consultation and Coordination

In compliance with Section IX of Instruction Memorandum No. CO-2002-029, the WRFO prepared a summary of analyses conducted for range permit activities, in addition to conducting a Class II on two known Livestock concentration areas within the LaGrange R. allotment (OAHF Doc. # RB.LM.NR2536). This analysis was submitted to the Colorado State Historic Preservation Office (SHPO) on 3/7/2023. Pursuant to the Protocol Agreement between the Colorado BLM and SHPO, this undertaking does not exceed any of the review thresholds that would require SHPO concurrence and there would be *no adverse effect* to historic properties.

No Native American religious concerns are known in the area, and none have been noted by Tribal authorities. Should recommended inventories or future consultations with Tribal authorities reveal the existence of such sensitive properties, appropriate mitigation and/or protection measures may be undertaken.

## 5. LIST OF PREPARERS

**Table 17. Interdisciplinary Review Team**

| Name             | Title                                | Area of Responsibility                                                          | Date Signed |
|------------------|--------------------------------------|---------------------------------------------------------------------------------|-------------|
| Robert Hampson   | Hydrologist                          | Hydrology, Riparian Systems                                                     | 3/7/2023    |
| Lisa Belmonte    | Wildlife Biologist                   | Migratory Birds and Greater Sage-Grouse, Big Game                               | 3/13/2023   |
| Aimee Huff       | Rangeland Management Specialist      | Vegetation, Upland Soils, Livestock Grazing, Project Lead                       | 3/13/2023   |
| Lukas Trout      | Archaeologist                        | Cultural Resources                                                              | 3/7/2023    |
| San Riebold      | Outdoor Recreation Planner           | VRM, Recreation, LWC, Public Access, WSA, Wild and Scenic Rivers, Scenic Byways | 2/9/2023    |
| Heather Woodruff | Ecologist                            | Project Lead                                                                    | 3/10/2023   |
| Pete Doan        | Planning & Environmental Coordinator | NEPA Compliance                                                                 | 3/14/2023   |



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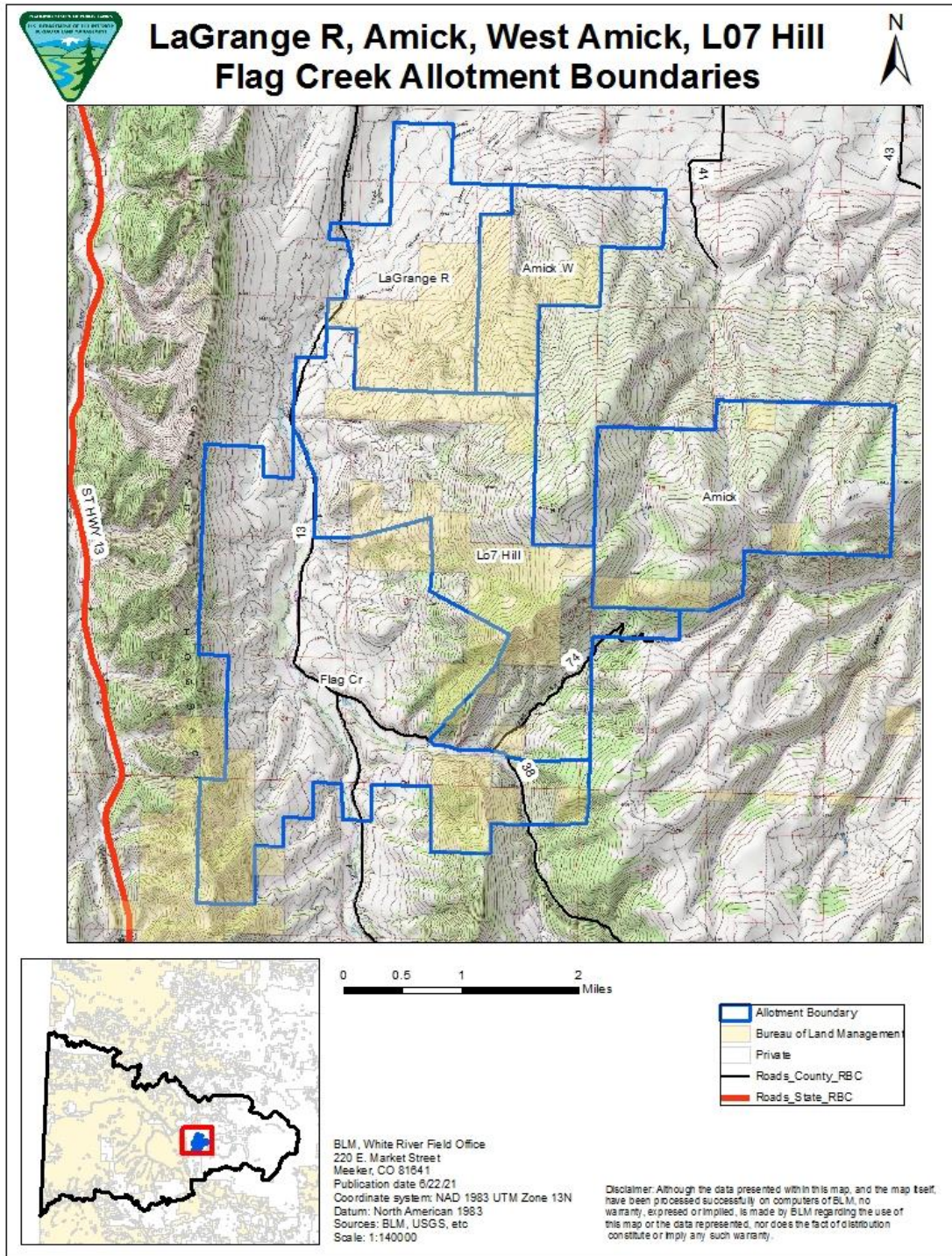
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White River Field Office Oil and Gas Development Approved Resource Management Plan Amendment (Oil and Gas RMPA). Date Approved: August 2015

## APPENDIX A. FIGURES

Figure 1. LaGrange R., West Amick, LO7 Hill and Flag Creek Grazing Allotments.





**Figure 2. West Amick, LaGrange R., LO7 Hill and Flag Creek New Grazing Allotment Boundaries.**

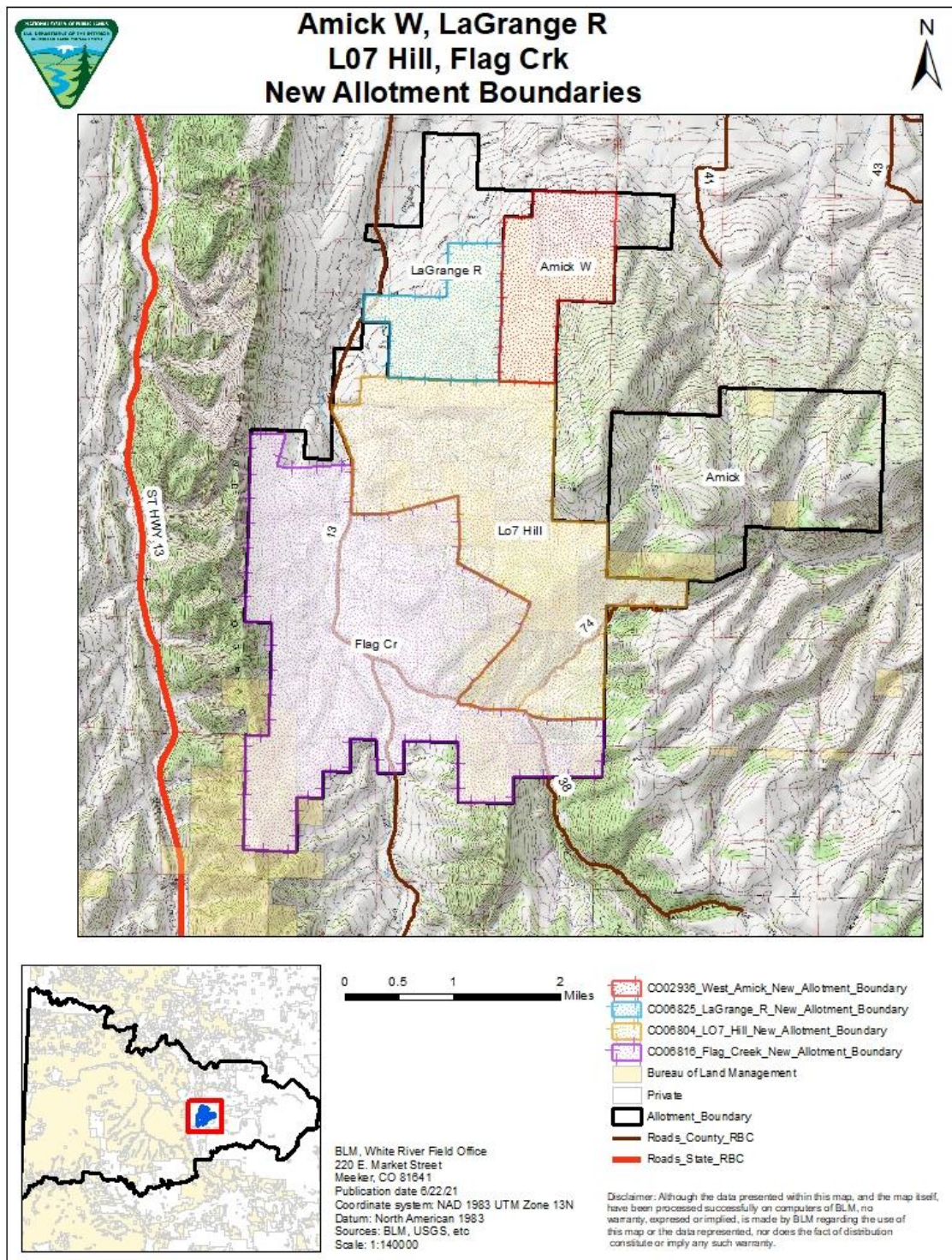
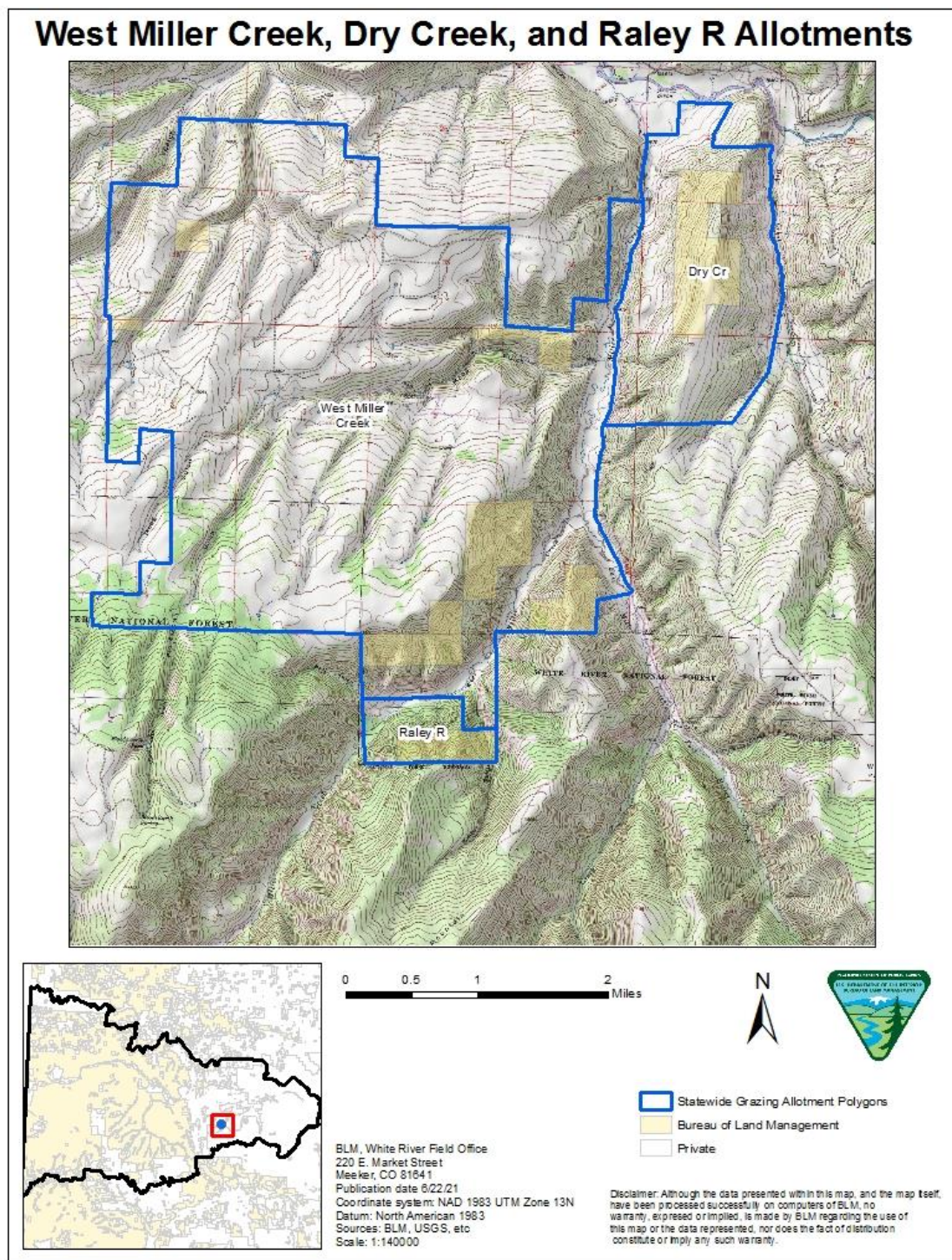


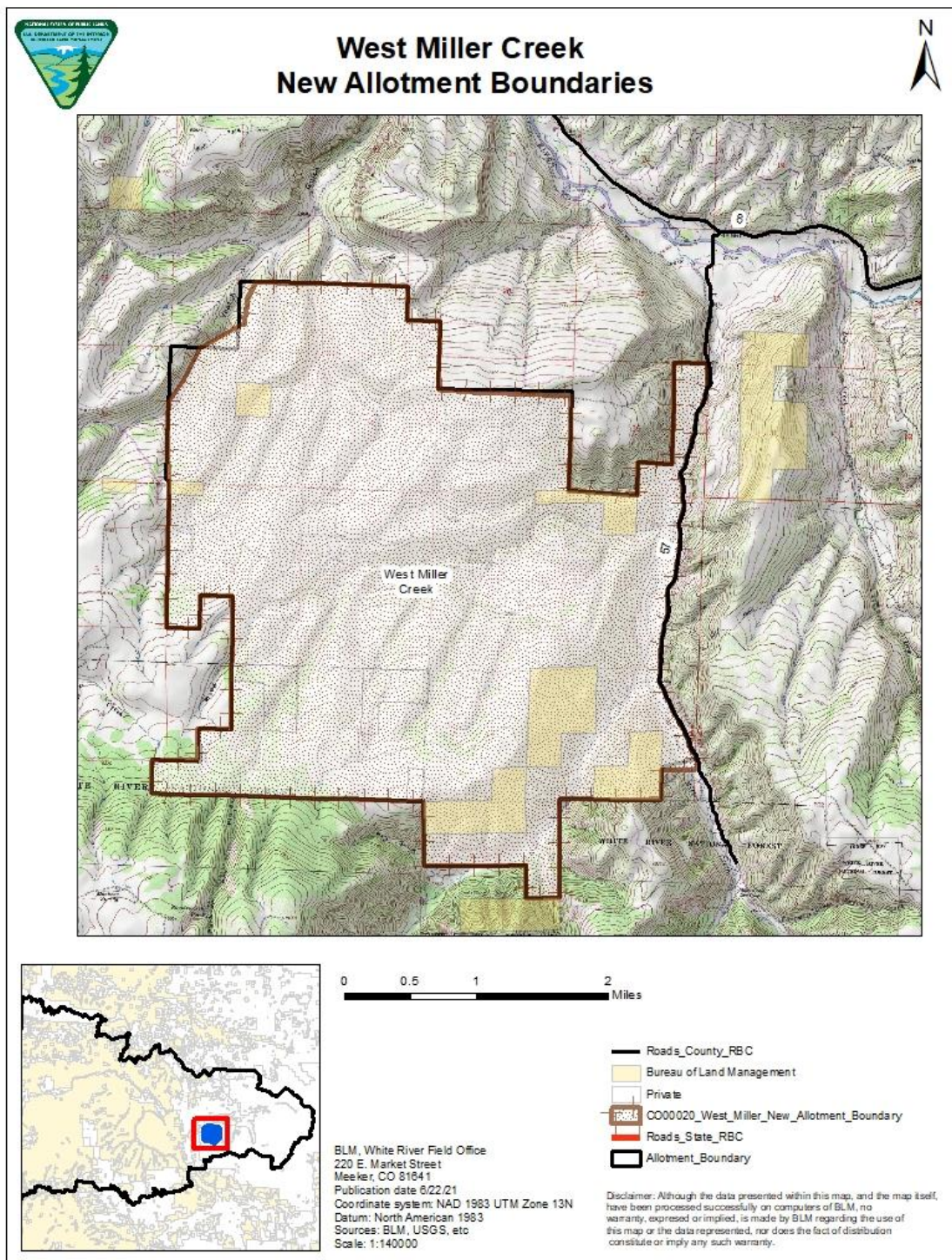


Figure 3. West Miller Creek, Dry Creek and Raley R. Grazing Allotments.





**Figure 4. West Miller Creek New Grazing Allotment Boundary.**





**Figure 5. Jolley H. and Woodward T. Grazing Allotments.**

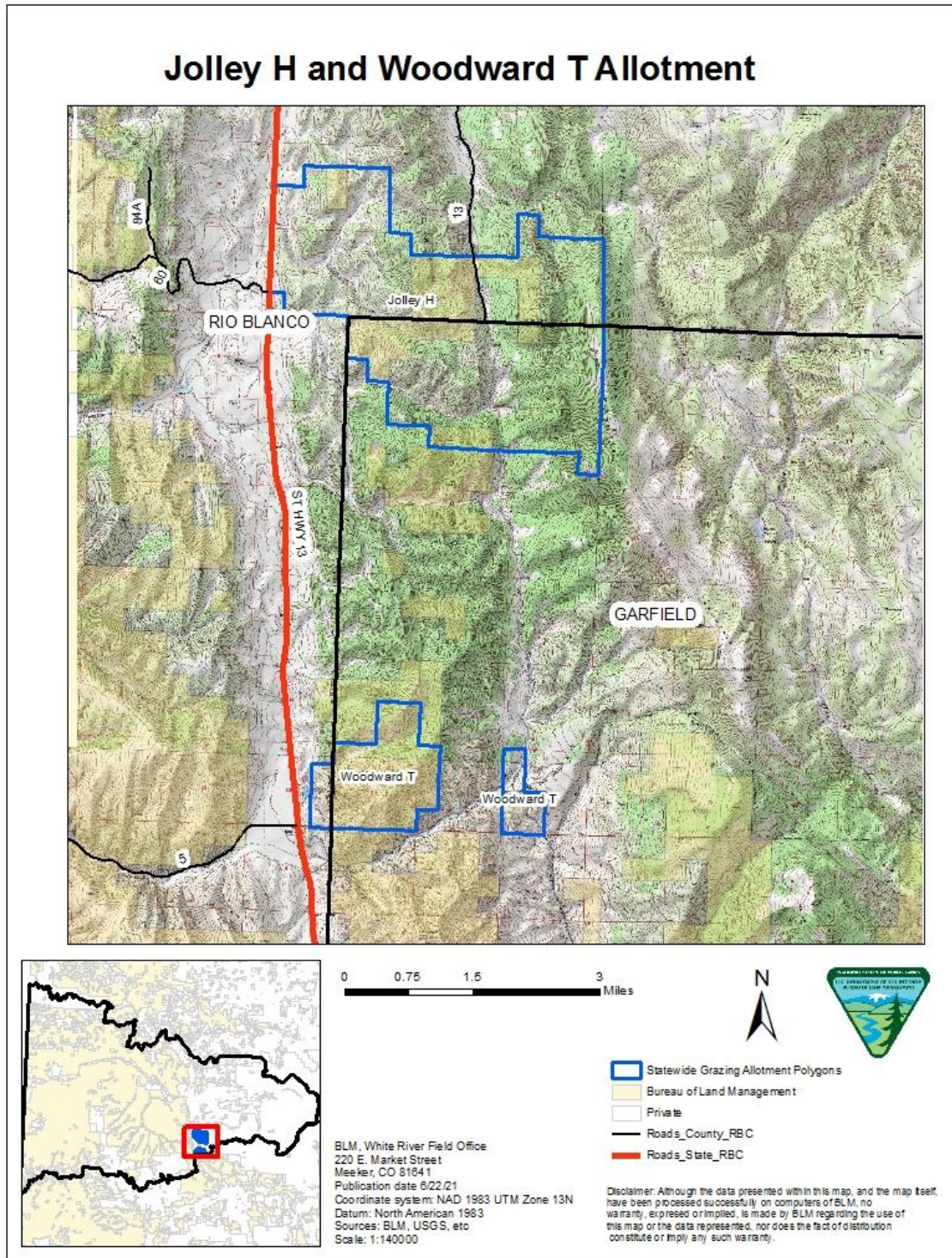
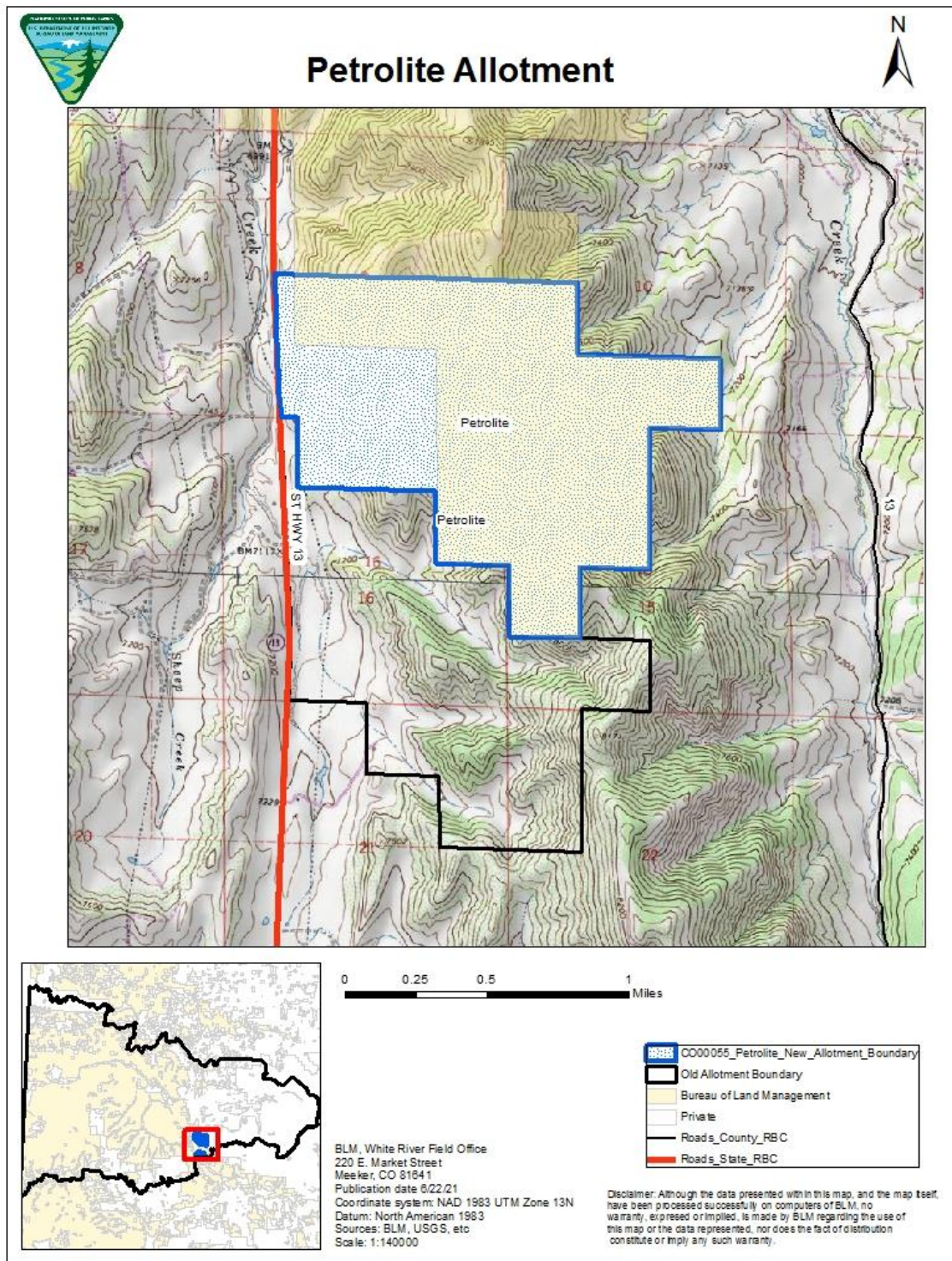


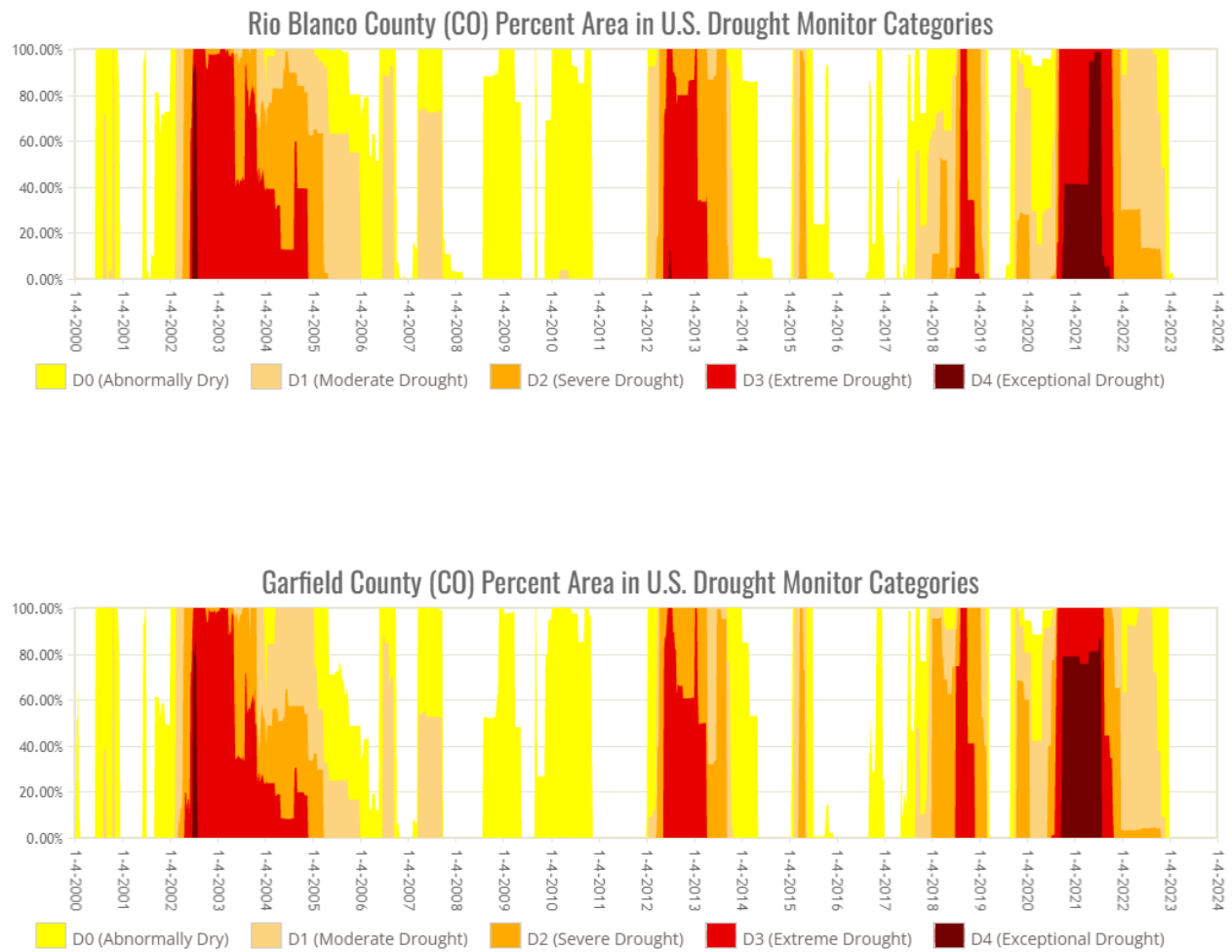


Figure 6. Petrolite Grazing Allotment New and Old Boundaries.





**Figure 7. U.S. Drought Monitor Categories for Rio Blanco and Garfield Counties, Colorado.**



## APPENDIX B. THRESHOLDS AND RESPONSES

When there are indications of below normal precipitation, the permittee and the BLM would assess local conditions and outlooks to determine what adjustments are needed (including, but not limited to, pasture deferment, rest, modified livestock grazing rotation, change in livestock numbers).

The Society for Range Management has defined drought as receiving 75 percent or less precipitation than the long-term average (SRM 1989). More specific definitions and criteria can be found from the USDA/NOAA Drought Monitor and Svoboda et al. (2002).

The BLM would use precipitation in conjunction with drought condition and outlook predictions from the USDA/NOAA Drought Monitor (<http://droughtmonitor.unl.edu/>) to determine climatic conditions in the area of the allotment. The long-term average precipitation amount for each month and season would be calculated for the affected allotments using data collected from the Rangely Western Regional Climate Center (WRCC) weather station, the most appropriate and proximate remote automated weather station (RAWS).

Although drought identification would be based on the Drought Monitor, actual management actions and procedures would be based on site-specific conditions within the allotment as shown in Table B1. Procedures would be followed consistent with BLM IM 2013-094 Resource Management During Drought.

**Table B1. Management Responses to Various Precipitation Scenarios**

| Precipitation/<br>Vegetation Condition                          | Grazing Management<br>Response                                                                                                                                                     | Additional Considerations                                                                                                                                                                                                             |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Normal (Not Drought)                                            | Follow normal grazing schedule with normal utilization targets.                                                                                                                    | Conduct visual assessments of utilization and track precipitation. Consider timing of precipitation and assess vegetation conditions when planning current year's use. Adjust rotations as needed to stay within utilization targets. |
| Below Normal 65%-75%<br>(Abnormally Dry to<br>Moderate Drought) | Coordinate to schedule reduced numbers and adjust grazing schedules to rotate through pastures such that utilization averages 40 percent, potentially leaving each allotment early | Continue to monitor utilization and precipitation. Consider timing of precipitation and vegetation conditions when planning current year's use.<br><br>Communicate altered rotations needed to achieve desired utilization levels.    |

|                                                         |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                          |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Below Normal <65%<br>(Severe to Exceptional<br>Drought) | Coordinate to schedule<br><u>substantially</u> reduced numbers<br>and to adjust grazing schedules<br>to rotate through<br>allotments/pastures such that<br>utilization averages 40 percent,<br>potentially leaving allotments<br>early. | Consider complete rest/deferment<br>until perennial grasses have<br>produced mature seed or until key<br>forage species are dormant.<br><br>To allow improved recovery, plan<br>the following year's grazing at<br>potentially reduced numbers to<br>allow for recovery. |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## **APPENDIX C. STANDARD TERMS AND CONDITIONS (ALTERNATIVE A AND B)**

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1. Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.
2. They are subject to cancellation, in whole or in part, at any time because of:
  - a. Noncompliance by the permittee/lessee with rules and regulations.
  - b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based.
  - c. A transfer of grazing preference by the permittee/lessee to another party.
  - d. A decrease in the lands administered by the BLM within the allotment(s) described.
  - e. Repeated willful unauthorized grazing use.
  - f. Loss of qualifications to hold a permit or lease.
3. They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans **MUST** be incorporated in permits or leases when completed.
4. Those holding permits or leases **MUST** own or control and be responsible for the management of livestock authorized to graze.
5. The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.
6. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
7. Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.
8. Livestock grazing use that is different from that authorized by a permit or lease **MUST** be applied for prior to the grazing period and **MUST** be filed with and approved by the authorized officer before grazing use can be made.
9. Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.
10. The holder of this authorization must notify the authorized officer immediately upon the discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (cultural items), stop the activity in the area of the discovery and make a reasonable effort to protect the remains and/or cultural items.
11. Grazing fee payments are due on the date specified on the billing notice and **MUST** be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of \$25 or 10 percent of the amount owed but not more than \$250) will be assessed.
12. Members of Congress may not enter into a grazing permit or lease. 41 USC 6306 (2014). Further, no officer, agent, or employee of the Department of the Interior, other than

members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App. 1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease for grazing or derive any benefit to arise from a permit or lease for grazing.

## APPENDIX D. ADDITIONAL GRAZING PERMIT/LEASE TERMS AND CONDITIONS

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Livestock grazing permits/leases may also contain site-specific terms and conditions “determined by the authorized officer to be appropriate to achieve management and resource conditions objectives”, to ensure conformance with Colorado Public Land Health Standards and Fundamentals of Rangeland Health, and to “assist in the orderly administration of the public rangelands” (43 CFR 4130.3, 4130.3-2). The following terms and conditions would apply to Alternative B.

1. Annually, no less than 30 days prior to turnout, the permittee/lessee will, through documented discussion with the assigned BLM range specialist and landowner, submit a plan of operation (grazing application) for the grazing year to the BLM for approval. The plan of operation must specify the planned use periods, numbers of animals, and incorporate pasture rotation to ensure that growing season rest is provided (RMP 2-25) consistent with Colorado Livestock Grazing Management Guideline 1.
2. The permittee shall submit an Actual Use form to the BLM within 15 days after completion of their annual grazing use as outlined in 43 CFR 4130.3-2(d). Actual use and the annual grazing plan together will serve as effectiveness monitoring.
3. Annual grazing use would not exceed the scheduled AUMs within the allotment or the identified utilization thresholds identified below.
4. Average utilization levels by livestock would not exceed (RMP 2-13):
  - a. Key Grass Species
    - i. 40% on key grass species for the grazing period from April 1 to June 15
    - ii. 40-60% for the grazing period from June 15 to September 15
    - iii. 60% for the grazing period from September 15 to March 31
  - b. Key Browse Species
    - i. 40% for the grazing period from April 1 to September 30
    - ii. 50-60% for the grazing period from October 1 to March 31
5. In conformance with 43 CFR 4180.1, where the results of any future Land Health Assessment, shows that the Colorado Public Land Health Standards are not being met, or progress is not being made toward meeting the Standards, and the determination indicates that current livestock grazing is the causal factor, appropriate adjustments to grazing would be required not later than the start of the next grazing year.
6. Annually, the permittee will provide to the BLM pre- and post-grazing photos at established agreed upon photo points within key areas or near established monitoring plots.

7. To improve livestock distribution on the public lands, no salt blocks and/or mineral supplements will be placed within ¼ mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated through a written agreement or decision. (43 CFR 4130.3-2(c))
8. Proposed new water sources and associated infrastructure on public land must be analyzed through NEPA and approved by BLM prior to construction. (43 CFR 4120.3-1(f))
9. The permittee/lessee must provide reasonable administrative access across private and leased lands to the BLM for the orderly management and protection of the public lands. (43 CFR 4130.3-2(h))
10. The permittee/lessee is responsible for informing all persons who are associated with the project that they will be subject to prosecution for knowingly disturbing archaeological sites or for collecting artifacts.
11. If any archaeological materials are discovered as a result of operations under this authorization, activity in the vicinity of the discovery will cease, and the BLM WRFO Archaeologist will be notified immediately. Work may not resume at that location until approved by the authorized officer (AO). The permittee/lessee will make every effort to protect the site from further impacts including looting, erosion, or other human or natural damage until BLM determines a treatment approach, and the treatment is completed. Unless previously determined in treatment plans or agreements, BLM will evaluate the cultural resources and, in consultation with the State Historic Preservation Office (SHPO), select the appropriate mitigation option within 48 hours of the discovery. The permittee/lessee, under guidance of the BLM, will implement the mitigation in a timely manner. The process will be fully documented in reports, site forms, maps, drawings, and photographs. The BLM will forward documentation to the SHPO for review and concurrence.
12. Pursuant to 43 CFR 10.4(g), the permittee/lessee must notify the AO, by telephone and written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), the operator/holder/applicant must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.
13. The permittee/lessee is responsible for informing all persons who are associated with allotment operations that they will be subject to prosecution for disturbing or collecting vertebrate or other scientifically important fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands. If any paleontological resources are discovered as a result of operations under this authorization, the permittee/lessee must immediately contact the appropriate BLM representative.

## **APPENDIX E. ALLOTMENT TERMS AND CONDITIONS**

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The following terms and conditions have been identified through impacts analysis in this EA and would apply to Alternative B. Each term and condition would be applied at the pasture or allotment level to meet resource objectives.

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### ***LaGrange R. Allotment Terms & Conditions***

Manage livestock grazing such that seasonal habitat desired conditions for GRSG are met where ecological sites allow, as described in Table 2-2 of the Northwest CO ARMPA.

- Brood-rearing/Summer:
  - 10-25% sagebrush canopy cover
  - >15% perennial grass and forb canopy cover on arid sites
  - >25% perennial grass and forb canopy cover on mesic sites
  - Proper functioning condition of riparian areas
  - Preferred forbs are common with several preferred species present in upland and riparian areas
- Winter habitat:
  - >20% sagebrush canopy cover above snow on arid sites
  - >25% sagebrush canopy cover above snow on mesic sites
  - >10 inches sagebrush height above snow

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### ***West Pasture of the West Amick Allotment Terms & Conditions***

Manage livestock grazing such that seasonal habitat desired conditions for GRSG are met where ecological sites allow, as described in Table 2-2 of the Northwest CO ARMPA.

- Brood-rearing/Summer:
  - 10-25% sagebrush canopy cover
  - >15% perennial grass and forb canopy cover on arid sites
  - >25% perennial grass and forb canopy cover on mesic sites
  - Proper functioning condition of riparian areas
  - Preferred forbs are common with several preferred species present in upland and riparian areas
- Winter habitat:
  - >20% sagebrush canopy cover above snow on arid sites
  - >25% sagebrush canopy cover above snow on mesic sites
  - >10 inches sagebrush height above snow